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PIGEON SHOOTING

BY

"BLUE ROCK"



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PIGEON SHOOTING.



CAPT. A. W. MONEY
"BLUE ROCK"

PIGEON SHOOTING

With Instructions for Beginners
and Suggestions for those who participate in the
Sport of Pigeon Shooting



BY

CAPT. ALBERT W. MONEY

“BLUE ROCK”

• • •

Edited by A. C. GOULD



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EDITOR'S PREFACE.

The literature pertaining to field sports is represented by many volumes, but, singular to state, there is no work devoted to the great and constantly increasing sport of pigeon shooting. As editor of a sportsman's journal, the writer some time ago perceived the dearth of literature on this subject, and for a long time sought to secure the service of one who could, from practical experience, give the much called for information. This was a difficult task, for those who had made an intelligent study of pigeon shooting were very few, and most of those had confined their practice to a limited field.

When Capt. A. W. Money came to America to engage in a business here which was closely connected with the field and trap shooting, the writer learned of his remarkable experience as a pigeon shooter, both in Europe and America, and it seemed that no one was so well qualified to write upon the subject of pigeon shooting as Capt. Money.

It required considerable persuasion to induce this veteran to wield his pen, but he finally consented, and a series of papers were published in the columns of SHOOTING AND FISHING. These papers met with a flattering reception; veteran pigeon shooters were astonished at their thoroughness and the amount of practical information they contained; the novices by perusing them were able to raise themselves to the ranks of experts. The issues containing these papers soon became exhausted; then followed urgent requests that they be published in book form, and these requests became so numerous that Capt. Money was induced to revise the papers. By his emendation we feel that the volume herewith presented is replete with practical information, which will serve as a valuable guide to all who wish to acquire proficiency in pigeon shooting.

A. C. G.

Editorial Office,

Shooting and Fishing,

New York.

AUTHOR'S PREFACE.

There have been many books written on shooting in the field, but I have never come across one on trap shooting; and yet, it appears to me that if a man wishes to become really expert at this form of sport, he will be able to learn much from a careful perusal of the experience of one who has made a study of it for years, and who has himself been a successful trap shot as well as a game shot, not only in America and England, but in many other parts of the world.

In the course of the last twenty-five years, I have met and known intimately most of the best known trap shots. I am one who believes that the longer I live the more I can learn, and that other people's opinions are always worth considering, and perhaps adopting, if, on careful consideration they are found to be based on facts and good judgment. Therefore, in the following pages I have given my own experience as well as that of the famous crack shots of Europe and America, both amateur and professional.

A. W. M.

OAKLAND, N. J.

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PIGEON SHOOTING.

CHAPTER I.

Instructions for the Beginner—Position in Pigeon Shooting— How to Shoot at a Pigeon.

For many years past, pigeon shooting has been such a fashionable amusement, that for a man to say he has never shot pigeons at the trap, is almost equivalent to saying he is not a shooter. There are, of course, exceptions to this rule, and one, I think, of the chief causes of these exceptions is that live pigeon shooting is, and always must be, an expensive luxury; but it is made more so from the fact that a beginner has little or no chance of winning when competing with those who have practiced this particular form of sport for any length of time and so become expert at it.

The question is often asked, Does pigeon shooting help to make a man a good shot in the field? I should undoubtedly reply, Yes. It shows him what his errors are in shooting, and enables him to correct them; and if he wishes to be instructed, he can learn more about guns, loads, swing, lead, and all that goes to make him a master shot, in six months as a pigeon shot, than he will learn in six years as a game shot. Few men living have shot more game in the field than myself, and I can say the same of pigeon shooting. I have for many years held my own with the very best at either sport.

As I write these lines, I shall try to imagine that you, my reader, are going to shoot a pigeon for the first time and that you want to know as much about it as the writer.

First, study your position. You have the five traps in a semicircle in front of you, and you must be able to swing your body quickly toward whichever trap is pulled, so as to be in the best position to kill the bird as it leaves that trap. If you stand with your shoulders squarely to the front, you will not be able to shoot a right quarter from No. 5 trap, the right hand one,

because it is always easier to swing to the left than to the right, from the fact that the stock of the gun is resting against the right shoulder. You must, therefore, stand with the left foot thrown forward, the body upright, and the feet slightly apart; in fact, very much in the attitude of a boxer. The higher the gun is held, the quicker you will get your aim on the bird; therefore, hold it as nearly up to the shoulder as you can, the left hand well extended, but not to its full length, or you will be hampered in shooting a bird coming straight toward you. Take care that there is nothing stiff or rigid about your body, arms, legs or head; grasp the gun very firmly with both hands. You are now ready to have the trap pulled. Give the caution, "Are you ready?" to the puller, in a firm, distinct tone of voice, and on receiving his reply, give the word, "Pull," in such a way as not to jerk your body, and perhaps make you miss your shot, as I often see done.

On saying "Pull," your mind should be concentrated on trying to see, as quickly as possible, which of the five traps is being pulled, and this is of the greatest importance; therefore, keep your eyes looking over the middle, or No. 3 trap, but in such a way that you are seeing all the other traps at the same time. At the slightest sign of a trap moving, swing on your heels slightly toward that trap, at the same moment bringing the gun to the firing position and pull the trigger the instant you see that you have covered your bird—that is, supposing the bird has left the trap; if you have missed with your first barrel, keep the gun still to the shoulder and continue to follow the bird's flight with the gun, firing the second barrel the moment you feel you are pointing in the right place.

If the pigeon does not at once leave the trap, a thing which rarely happens where they are fast, as in England, either call, "No bird," or keep the gun leveled just over the bird's head, and at the first moment of its flight throw the muzzle ahead of the bird and pull. Remember that, other things being equal, a bird which does not fly as the trap is pulled is a harder bird to shoot than one that does; the reason for this being, that when you say "Pull," you have your whole being, mind and body, braced up to its full tension, and as the trap opens, you swing to it like lightning; but if the pigeon then fails to rise, you have lost your swing, and

should it afterward start with anything like a rapid flight, you are very likely to shoot a little behind it.

The very best pigeon shots make it a rule to call, "No bird," when there is what is called a sitter, unless the bird from its appearance shows that it will not fly fast. Nothing but practice will enable the shooter to decide this point at a glance.

Of course, I am taking it for granted that my reader has read the rules of pigeon shooting, which vary slightly according to the club or ground at which he is shooting.

I would lay great stress on the necessity of concentrating your whole thought and attention on the shot. I have for many years past, known all the best pigeon shots, both amateur and professional, who have made their mark on either side of the water, and I have seen the very best of them miss comparatively easy birds, because their thought for the moment was on something else; some one, perhaps, having made a remark as they went to the score and so called off their attention from what they were doing.

If these men, then, require all their attention and concentrated energies to make sure of shooting true and killing their bird, how much more must it be with the beginner.

Next to this I would advise keeping a cool and equable temperament. Never allow yourself to be upset or put out by anything that may occur. If a miss comes, take it philosophically; we all miss at times. Don't lose your temper and blame your gun, or shells, or anything but your own want of holding straight. Note in what direction the bird was flying when you missed it, and what trap it came out of, so as to discover your weak point as soon as possible, and take measures to correct it. Never kick—it does no good; it spoils your shooting, and makes you a nuisance to others. If you keep on missing, and cannot account for it, get some one who is an old shot to stand directly behind you when you shoot, and tell you where you shoot. Strange as it may seem, he can see the direction of your gun at moment of firing better than you can. Do not, however, believe what every one tells you in that respect. Many men who are not standing in a proper position to see, or are not carefully noting the direction of your gun and the bird at the moment, will say, "You shot over or under, behind or in front of that bird." They

are false prophets, and sometimes are wolves in sheep's clothing.

In shooting at a bird crossing you, as in game shooting, you must swing your gun with the bird for a moment to get the true speed, then force it ahead as far as your judgment tells you is necessary; then pull the trigger. The difficulty in doing this is that you have to guard against two things: First, you may lead the bird too much or too little; secondly, in trying to lead enough, you may unconsciously pull your gun down below the proper line of flight, or raise it above, though that is rarely done. The first, however; *i. e.*, shooting below, is a common error, especially with birds flying from right to left.

To show how necessary swinging with and leading a bird is, I would ask any shooter, who has not already done so, to go to a swift running, but smooth stream, get some one to put a small floating object in the water, and shoot point blank at it as it passes, you standing, say, 35 yards from the object. Note where your shot strikes the water, and then compare in your mind the flight of a swift bluerock pigeon and the object fired at.

CHAPTER II.

Guns and Ammunition for Pigeon Shooting—The Proper Way to Handle a Gun—Sighting.

While you are following my instructions in shooting at the floating object, it will be very instructive also to note whether, when you brought your gun to your shoulder and fired quickly, you shot over or under the object. If the former, you have a gun that is suited for pigeon shooting, the reason for which I shall explain further on.

A gun with a pull-off to the trigger of about 3 to 3½ pounds is best, but one in which the pull-off keeps the same and does not vary is a necessity; and yet this is not as easy to find as people generally suppose.

The question of cast-off in the stock of a gun is a most important one. When a shooter throws his gun quickly to his shoulder, pointing it at some near object, and finds, on closing his left eye and glancing with the right along the rib, that he is looking along the center, he may consider that he has a gun with the right amount of cast-off; that is to say, the heel of the stock has a slight bend away from the body. Few guns are made with a perfectly straight stock. I have, however, advocated them for many years, and I see that gun makers are putting far less cast-off to the stocks now than formerly.

The Winchester, Burgess, and Spencer magazine, or pump guns, as they are generally called, which in the hands of such men as Rolla O. Heikes, Ferd. V. Van Dyke, Jack Parker, Capt. B. A. Bartlett and scores of others, are doing such wonderful shooting, are all built without any cast-off whatever.

It is necessary for a pigeon shooter to have a full choked gun, especially if he intends to use the same gun in all weathers and at all distances. A modified choke, or even a cylinder, might be more useful when standing close to the traps and on a still day, but for shooting at fast birds on a windy day and at 30 yards rise, a full choke is a necessity.

Using a full choke, however, means that the greatest accuracy must be maintained with every shot, as the killing circle of No. 7 shot at 40 yards is not more than 26 inches. A bird shot at inside an imaginary 26-inch circle will be riddled, but outside that, though it may be struck with a few pellets, it is most likely to escape.

What size of shot and what charge of powder are best, are most difficult questions to answer, as almost everyone has an opinion of his own on these subjects, and these opinions vary extensively.

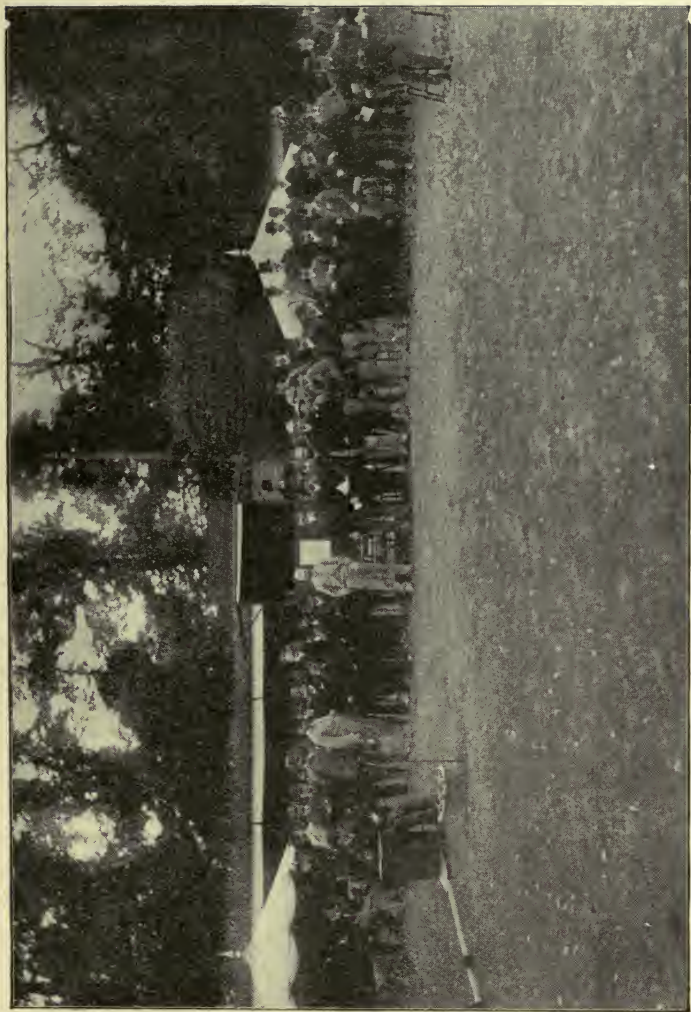
Small-sized shot gives you a larger killing circle, as it spreads more than large; but it does not travel so fast to the mark, and each pellet, when it hits the pigeon, does not make such a killing wound. I have used all sizes in turn, and, after long experience, have come to the conclusion that $1\frac{1}{8}$ ounces of No. 7 shot is the best for all purposes, using No. 6 in left barrel on very windy days, to escape the drift of the shot as much as possible.

The amount of the powder charge in a 12-bore gun of $7\frac{1}{2}$ pounds weight should never be less than 42 grains (or three drams), nor more than 50 grains of E. C., or its equivalent in other nitro powders. No absolute rule can be laid down, as different guns behave so differently with various charges. Some guns shoot a closer pattern with 45 or 50 grains than they do with 42; some recoil very much with the higher charge, while others do not.

The chamber of a gun is bored, as a general rule, to take a $2\frac{5}{8}$ -inch shell; but this length is too short to contain a proper charge for pigeon shooting, if properly wadded, and leave sufficient margin for a good turn-over, or crimp, which, with all nitro powders, is of vital importance.

A shell should always have $\frac{1}{4}$ -inch of turn-over, and should be crimped down hard on to the wad over the shot. A $2\frac{3}{4}$ -inch shell is the most useful length.

There is a matter of the very greatest importance that I should like to urge upon all pigeon shooters, old, experienced hands as well as the young beginners; that is, care in handling a loaded gun. At all good clubs there are rules regarding this, which are in the right direction, but they do not go far enough. Year after



HURLINGHAM CLUB GROUNDS

year the most deplorable accidents occur, which could be so easily avoided; and they seem rather to increase in number than diminish. The most prolific source of these accidents is from improperly closing the gun after the cartridge has been inserted. I never attend a shoot that I do not, once or more during the day, see a man close the action of a loaded gun with the muzzle pointing directly toward some person or another, usually toward the man who has gone out to place a bird in the trap. A gun is always likely to go off when being closed; and this may happen from various causes, about which I shall write later. Therefore, in closing your gun, be very careful how you do it; and especially be careful where it is pointing at that moment. The usual way of closing a gun is to raise the barrels to the stock with the left hand; but the right and safe way is to raise the stock to the barrels with the right hand.

. In the first instance the muzzle is usually pointing breast high at the moment of closing; in the second, the muzzle will be found to be pointing toward the ground about three yards in front of the shooter's feet. This precaution, however, is not sufficient. I once saw an accident which terminated fatally for the shooter, and I have seen the same thing happen a good many times when no fatal result has followed; but that was providential, and the opposite might well have been the case. It happened in this way: The shooter, an old sportsman, both in the field and at the trap, went to the mark, placed his shells in the gun and closed it. As he did so one barrel was discharged. The force of the explosion caused him to let the gun drop, when the other barrel was discharged, shooting him through the head. This was caused by the jar as the butt of the gun came in contact with the ground, and it being the heaviest part of the gun, fell fastest and brought the gun into an almost perpendicular position.

I advise pigeon shooters to make these rules: First, never to snap your gun shut, but close it gently; secondly, lift the stock up to the barrels, and not the barrels to the stock; thirdly, while closing your gun after putting in shells, hold it firmly, so that if one barrel should explode, the gun will not fall out of your hands.

I would here mention that a common cause of guns being discharged when being closed, is when shells are being used that

have been reloaded and the fresh primer has not been driven completely home. I have myself seen three shells out of about one dozen used by a shooter explode in one day, and on looking at the rest of his shells I found several more primers projecting; the shooters present declined to risk their lives by allowing this careless shooter to use his ammunition.

Another cause of accidental discharges is the firing pin remaining slightly projecting beyond the breech piece; this pin coming in contact with the primer on the next cartridge as the gun is closed, causing it to explode; or the second barrel may jar off from the gun being roughly closed; or a piece of grit or some foreign substance may have got between the striker and the primer.

I have already mentioned swing and lead. Every shooter should study to get both to perfection, and nothing but practice will do it. As the gun is thrown to the shoulder, instinctively the shooter moves or swings the muzzle, to keep pace with the flight of the object at which he is shooting; but if he does no more, when he pulls the trigger his shot will pass behind the bird. He therefore must make the muzzle, pass ahead of the bird at the moment of firing, and he must take care that in pulling the trigger he does not stop his swing.

Much has been written in books and newspapers on swing versus lead. To my mind every good shot, instinctively, though perhaps without being aware of it, is doing both every time he shoots a crossing bird.

Another point on which much difference of opinion has been expressed among shooters is, Should one shoot with one or two eyes open? A man may think he shuts one eye, while in reality he is keeping both wide open. He thinks he shuts one, because, when he puts his gun to his shoulder, as if in the act of aiming, he finds, in order to look along the rib, he closes one eye; but when he has to watch the motion of a bird flying in the air, or an animal running on the ground, he keeps both eyes wide open, and wishes sometimes that he had an extra pair of eyes. Anyhow, study to shoot with both eyes open, to their fullest extent.

If you take your gun in your hand, fix both eyes on some object, throw the gun to your shoulder pointing at the object,

then close the left eye and look along the rib,—you will find that you are pointing as truly at the object as though you had shut one eye at first; and had the gun been loaded, and had you pulled the trigger at the moment you threw the gun to your shoulder, you would assuredly have hit the mark. I am, of course, supposing that the gun you are handling is one that suits you as to length of stock, bend, cast-off, etc.

Another point on which shooters disagree, is as to whether shooting at inanimate targets spoils a man's shooting at live birds.

In my opinion, a man can learn a great deal from inanimate bird shooting; though, perhaps, shooting too often at them may make him slow at live birds. This is because no ordinary shooter breaks a clay pigeon thrown from a strong trap, until it has traveled about 25 yards from the trap, which, if he is standing 16 yards from it, makes the target 41 yards away before he shoots. The reason of this is, the clay bird travels fastest as it leaves the trap, but gets slower at 30 yards away from it; exactly the opposite is the case with live birds, which fly slowest at moment of starting, and acquire speed as they get their full power of flight.

It is desirable to shoot a live bird as soon as possible after it leaves the trap; the more so as then you have more time in which to use the second barrel; while with the clay pigeon you should wait till it has attained a distance of 25 yards before shooting. A man can, however, as I said before, learn very much from target shooting, especially if he has them thrown with that object. For instance, few men can swing on to their birds equally well to left and right; but by persistent practice at clay birds thrown first left and then right, at a sharp angle across you, you can overcome your weak point.

This you can do, especially if you stand 20 yards to the right or left of the trap, and 16 yards in rear of it, and have the targets thrown so as to pass, say, 30 yards across your front, or from that to 40 yards. You will find this difficult shooting, and without swing and lead you cannot hit them. Again, some people are bad shots at rising birds. They can have the targets thrown upward at different angles, find out the cause of missing and practice at their weak point. Others are weak at incomers.

Nothing is easier than to have a trap throw birds back at you and passing over your head, by taking your position, say, 45 yards behind the trap and thus secure the desired practice.

Beginners, especially, are apt to be very slow in using the second barrel; but by practicing at clay targets, that can be easily overcome, and the second barrel used quickly.

In all this practice, however, care must be taken to have the targets thrown far enough, never less than 46 to 50 yards from the trap, or more, otherwise the practice will be too easy, and will not be good practice for shooting live birds.



CHAPTER III.

Field Shooting and Pigeon Shooting Compared.

So far, I have written what I thought might be useful to a novice in trap shooting, and I hope that some of the hints I have given may be of use. Almost anyone may become a good shot at the traps who will take the trouble to practice and study his weak points and correct them.

It is really far easier to become a good pigeon shot than to become a good game shot; but anyone who is expert at one ought, in time, to acquire skill with the other.

But there is a wide difference between the two sports. In field shooting a man cannot study his position; he is probably moving along at the moment the game rises; his right foot may be in front of his left, or the opposite; he may at the moment be standing squarely to the direction the bird is flying, or he may have to turn round to shoot; he may have one foot on a rock, and the other eighteen inches lower; and so on. And as to the bird. In place of coming out of a trap at a set distance in front of him, and then flying over level ground, with a good background it may rise under his feet, or 40 yards away to the right, left, or rear of him and the background, which always more or less affects a shooter's aim, is likely to vary with every shot.

In field shooting, too, most game flushes within 25 yards of the shooter, and as the sportsman is probably shooting with either a modified choke or a cylinder gun, he not only has a closer view of the game, but also has a much larger killing circle. Then again, with game, it is not necessary to center your bird every time to score a kill; a bird which falls dead 50 or 60 yards from you is gathered, and counts a kill; but this would be a miss in pigeon shooting, with a short, low boundary, as is usually employed. Then again, most game birds are very tender, and fall if struck with only a few pellets; whereas the bluerock pigeon is a marvel of pluck and endurance, and will continue its flight while there is a breath left in its body.

In pigeon shooting the question of nerves play an important part. A man standing at the score, with a number of people watching his shot, and perhaps laying bets on the result, is, without his knowing it, likely to be affected by an over wish to kill, which makes him shoot perhaps a little quicker or a little slower than he would have done had he been walking on the hillside and a bird had sprung 28 or 30 yards ahead of him. He would look upon the bird flushed on the hillside as a long shot, and would shoot in a quick, determined manner, giving his bird as little chance as possible, at the same time not over hurrying or being in the least bit jumpy. But a pigeon rising from a trap would be further away from the shooter when shot at, and would probably be flying faster, consequently a much longer lead would be necessary for a successful shot.

A man must be prepared to shoot game in any position, at any angle, at varying distances, with no two shots alike, with body bent or upright, on the side of a hill or on the level, in brush or in the open. One day he may be wearing a thick, warm coat, on another a thin one; whereas a pigeon shot studies always to wear the same coat. The game shot may have his pockets loaded with game or shells so as to pull on his arms; a pigeon shot would despair of doing any good work under such conditions. A pigeon shot, has, or ought to have, every bit of his mind concentrated on the shot he is about to take; a game shot is probably watching his dog or his companion, or perhaps at the moment he flushes a bird, is smoking his pipe or thinking of something else.

Pigeon shooting and game shooting are so different that you cannot make them alike. To be a first class pigeon shot, a man must have nerves like iron; no weak point about him. He must be able to concentrate all his thoughts and energies on the work he is doing. Good luck or bad luck must make no difference with him; he must not be easily cast down or easily elated. Nothing brings out the points of a man's character more than pigeon shooting. If he has a weak spot, it is sure, sooner or later, to come to the front. The niggardly man, the selfish man, the bad tempered kicker, and above all, the crooked man will surely come to grief. The crooked man had better leave the sport alone, as he will soon be found out and be known for what he is. But the nervy, high

principled, whole souled, hearty, jolly fellow, who can give and take, and enjoy life and good fellowship, and be a good fellow amongst good fellows, will find few ways of enjoying his leisure time more than in competing with others like himself at the traps.

No man lives that enjoys game shooting more than I, and few have had more opportunities of enjoying it. But I long ago learned that one cannot shoot game with a crowd; man is a gregarious creature, likes companionship, and plenty of it, therefore the company of fellow-shooters makes pigeon shooting appeal to many. Besides, the season for game shooting is short, and often one is unable to devote the necessary time to it, whereas, an afternoon's shoot at your favorite club takes little time and requires no preparation. Then, too, many men are not physically fitted for game shooting. Bad health, advanced years, stoutness, lameness, and many such causes, incapacitate a man from game shooting who would otherwise be devoted to it. To such I say, try pigeon shooting; give it a good, thorough trial.

In your early efforts don't be discouraged if at first it seems too hard; it only wants practice. Make it a sport, and not an art; try to help your neighbor to succeed. In sweep-stake shooting, always be willing to divide with another man, whether you think you can beat him or not, when he or you are left in it alone. Never watch for an unfair advantage over any adversary, and if it offers, don't take it. If a dispute arises, leave the decision to any unbiased brother sportsman, and then cheerfully abide by his decision. Nothing destroys sport so much as greed and hoggishness. If I could have my way, I would make it a rule in every club that where a tie had occurred between any two men in a shoot, either of them could insist upon his right to divide. Many clubs have been broken up by the hoggishness of one or two good shots insisting upon winning everything for themselves. This has led to class shooting; but this, while very useful where there are a great number of entries, as in a tournament, for instance, and among a certain class of shooters, never could be adopted in first-class clubs.

CHAPTER IV.

The Trigger Pulls of Guns for Pigeon Shooting.

Looking back at what I have written, I would say a word more on the subject of the trigger pulls or pull-offs of the gun. Not only should a shooter be sure that he has the pull-offs of the triggers of his gun correct, but he should from time to time see for himself that they have not varied, as they are likely to do; especially is this the case with hammerless guns, and more particularly so when, in addition, they are ejector guns. Many years ago I learned how much this matter of pull-off had to do with good shooting, and I had made for me a simple and inexpensive apparatus for testing the pull-offs of my guns, which I keep in constant use. This was nothing but one of the small spring weighing machines which are sold by all fishing tackle dealers for weighing fish, and which most anglers carry in their pockets. Have a piece of metal bent around the weighing machine in such a manner that it registers the weight at which the trigger is pulling at the moment it releases the tumbler. Also have a piece of stout wire six inches long attached to the hook from which the fish when being weighed would be hung, and let the end of this wire be bent so as to catch the trigger of the gun. By placing the gun on a table, hooking the wire on either trigger, and pulling steadily, you will at once see exactly how many pounds of pressure you must give with your finger to cause the gun to go off. As I said before, the usual pull-off for pigeon shooters is 3 to 3½ pounds. The right barrel is usually 3, and the left 3½ pounds. If the left barrel is less than 3 pounds, there is always a great chance that the explosion of the first barrel will cause the second lock to jar off, in which case both barrels are exploded almost simultaneously, causing an unpleasant sensation to the shooter and the probable loss of the bird, unless it be at those clubs where the rule has been changed so that the simultaneous discharge of both barrels is called, "No shot," or, "No bird," under any circumstances.

But there is another point connected with the pull-off which materially affects a man's shooting. Some triggers have what is called a dragging pull-off; *i. e.*, when the pressure is first put upon the trigger it gives without releasing the tumbler. This is the case with all inferior guns, and with some high class guns. Never buy or use a gun which does not go off at once to the requisite pressure, without any drag or give; and never buy or use a gun which pulls-off with a varying pressure—at one time, perhaps, of 3 pounds, at another of 5 pounds, at another of $1\frac{1}{2}$ pounds, and so on.

A friend of mine, who was a very fine shot in the field and at the traps, once complained to me that he had gone behind in his shooting at the traps, while in the field he was as good or better than ever. I mentioned this matter of pull-off, and asked him what pull-off he used. He said 3 pounds. On trying his gun, I told him he had quite a 6 pound pull-off, and on his getting it properly tested, he found it was, in fact, 8 pounds. He was, of course, using a different gun in the field, with a proper pull-off, but his pigeon gun had changed in trigger pull from 3 to 8 pounds; as he was shooting for very large stakes at the time, this little matter had probably cost him the price of a new gun several times over.

A few pigeon shots, and among them some good ones, stick to a heavy pull-off, because they have always been used to it; but these men from practice, have acquired a habit of applying about three pounds pressure to the triggers as they bring the gun to their shoulder; at the moment they wish the gun to go off, they apply the final pressure.

With the Army rifle, which, for safety, is never allowed to pull-off under 6 pounds, a man who tried to suddenly put a 6-pound pull on with his finger would make very poor shooting, but practice enables him to keep a steady pressure of probably four pounds on the trigger till the moment he wishes to fire, when a little extra pressure is sufficient.

The flight of a pigeon is or can be so rapid that a gun should go off at the moment you wish it. Any hang, however slight, is fatal to good marksmanship.

CHAPTER V.

Modern Improvements In Guns and Ammunition.

The quickness of explosion of primer and quickness of ignition of powder charge is another important matter. If you take a village sportsman in some remote part of Asia, who is provided only with a matchlock gun, and who has never seen anything better, and tell him that igniting the powder with a piece of slow match is not quick enough, he will probably reply, as I have heard them, that it is quick enough for him, and he has no ambition to have anything better. Some sportsmen, like this man, are satisfied with what they have, refusing to believe there can be anything better, and quite content with the work they are able to do with their old-fashioned appliances.

I can remember, when I was a boy, hearing an argument as to the advantages or disadvantages of a percussion gun over the old flint and steel, and the laugh of derision when it was claimed by one speaker that the percussion was so much quicker. So, later on, when the breech-loader came into fashion, men were very slow to realize that ignition was quicker with it than with the percussion muzzle-loader; still more was this the case when the central-fire breech-loader took the place of the pin-fire, which preceded it. Since that time still further improvements have been made in the same direction of quickness of explosion of the cap, or primer, which ignites the charge of powder. In the case of hammer guns, the hammer has been made smaller, so as to reduce the interval of time, small as that is, between the hammer beginning to fall and the moment of its reaching the striker, which gives the blow to the primer.

The hammerless gun goes still further in the same direction; but these, again, vary very much, some makes being very much faster than others; the Parker gun, for instance, is an American

gun which is exceptionally fast, and the Greener gun among the fast acting guns made in England. But while the gun manufacturers have been working in this direction, the powder manufacturers, and still more the shell and cartridge makers, have been trying to outdo each other in providing the sportsman with a primer, a shell, and a powder, which will be as quick as the proverbial lightning, or quicker.

It is the trap shooter who has made the need of these improvements apparent and forced manufacturers of sporting goods to pay due attention to them, and both the game shooter and the trap shooter is now reaping the benefit. It is only within the last few years, comparatively, that instruments have been invented which show the manufacturer what his gun or his powder, or his shell and primer can do. The chronograph, worked by an electric current, the cap testing machine, first invented and brought out by the E. C. Powder Co., and the various forms of pressure gauges which are now universally used by all first-class ammunition manufacturers, have, during the last few years, worked a marvelous change in ideas, and disposed of many theories and beliefs which were founded on ignorance.

At the present time it is useless for a manufacturer to claim more merits than his products possess. Formerly this was a matter of guess work, now it can be determined to a nicety by the instruments I have mentioned.

The chronograph will tell you to ten thousandth part of a second how much time elapses from the moment the trigger is pulled until the shot charge begins to move in the barrel, or until it reaches the muzzle of the gun, and so on up to any distance you wish to know the velocity of your charge, whether that be at 10, 20, 40 or 100 yards from the muzzle of the gun.

Now, this rapidity of explosion, of ignition, and of flight of shot, which are all three separate and distinct things, tending to the same result; viz., that of the shot striking the object aimed at in the shortest possible space of time, mean a great deal more to the shooter than perhaps he is aware of.

If it were possible for the shot from a gun to reach the object shot at, at the same moment the trigger was pulled, a good shot would rarely, if ever, miss the mark, any more than he would if

it were stationary; but it is having to allow for the interval that elapses between the moment of pulling the trigger and the charge of shot reaching the object, that makes most, if not all, of the difficulty. The more you can minimize this delay, the nearer you are sure to shoot to the object aimed at, the less likely is a bird, by some sudden twist in its flight, to pass out of the killing circle.

Before nitro, or smokeless, powders came into general use, and no one now dreams of using any other for trap shooting especially, it was only necessary for the shell maker to use a primer which gave a full, hot flash to insure perfect and instantaneous ignition. If this flash came through a larger or smaller hole in the base of the cartridge, and was closer or more remote to the powder, it made little or no difference so far as results went; but nitro powders, which are regular in their action and safe to use, are not nearly so sensitive as black powders, and it has been found necessary to construct a slightly different shell, or rather primer, for them. Shell manufacturers have to be far more careful now than they were formerly, that the quality and quantity of fulminate mixture in the primer is perfect and regular; that the thickness of metal used in making the primer is always alike, as well as that the base of the shell which holds it is correct in shape, and the hole through which the flash passes the same size, and, lastly, that the anvil, which fits into the primer and causes the explosion when the base of the shell is struck, is of proper size and shape and properly placed.

And again, with regard to the powder itself, there is far greater difference in the action of the different nitro powders now on the market than people have any idea of. It is the easiest thing in the world to make a smokeless gunpowder; any novice can do it who has a few chemical ingredients at his command; but it is quite another thing to make a powder which will not only be smokeless, but will, while giving the highest velocity, give regular pattern, not unduly strain a gun, not injure it by the action of the powder in the interior of the barrel or the breech mechanism, and be perfectly regular, so that one shot will always give the same result as another with the same load.

Some of the nitro powders now sold are good in one respect and bad in another; few of them are as regular as they should be,

and chiefly, I believe, for this reason, that a nitro powder is far more expensive to manufacture than the black, and there is always a great temptation for manufacturers to work it off at as low a cost as possible. Therefore, I would strongly recommend my readers to purchase powder manufactured by well established and wealthy corporations, such, for instance, as the E. C. Company, of Oakland, N. J.



CHAPTER VI.

Peculiarities of Pigeon Shooters—Things That Balk Shooters.

I have before remarked, that to be a good pigeon shot a man must concentrate his mind on each shot he fires. This is so much the case, and so well known among trap shooters that, if a loose pigeon is flying over the ground, or any little thing is happening which might in the slightest degree take off the attention of the man at the score, he will wait until it has ceased. The extent to which some crack shots carry this is ludicrous, and yet they are right. Some men will not shoot if an empty shell or a piece of paper is lying on the platform in front of them, and insist that they be removed. I think I am as free from what might be termed fancies as anyone, and yet I am aware that I have missed many shots from one thing or another quite as slight; something catching my eye and disturbing my attention at the moment of saying, "Pull."

Nearly all shooters have their special fads and fancies; but I think the most curious I ever met with was a man who would never shoot, no matter what the weather, without wearing a pair of rubber shoes, to give him, as he said, a good grip of the ground. This man is a very fine shot, both at the traps and in the field, and by no means finikin. Another man whom I know, and than whom no finer shot exists in America, will, before every shot, slightly raise his hat from his head and replace it again. Others breathe upon their hands to give them a firmer grip of the gun; some wipe their hands for the same reason; some think they can only shoot well in a thin soled pair of boots; others believe they must wear shoes with thick soles, and so on.

Now, are these mere fancies? There is generally something in them, and at all events, if a man has a fancy, he had better humor it, for nothing is so necessary for good, effective shooting as for a man to feel that himself, his gun, his ammunition, and everything about him are right.

PIGEON SHOOTING

Absolute freedom of the arms and a firm bed for the butt of the gun is very essential. Starched shirt fronts, brace buckles coming on the shoulder where the butt of the gun will rest, a



CAPT. MONEY'S POSITION AT THE TRAPS

coat which is so loose that it will wrinkle differently each time the gun is thrown up, or, on the other hand, one that in any way

holds the arm, or a waistcoat which is not cut out enough at the arm, and catches it as the gun comes up to position, are all causes for poor shooting.

Most men shoot better at one part of the day than at another; some shoot best in the morning, others in the afternoon, and so on, showing, I think, that good shooting is often a question of good digestion, and affected by what a man's habits are as regards eating and drinking. As a rule, I think most men shoot well on a comparatively empty stomach; but this is by no means always the case; some men also require a little stimulant, some a good deal, some do best with none at all.

The position which different men assume at the traps is various, and some are ridiculously awkward and constrained. As a rule, the best shots stand in an easy, unconstrained attitude, as described in one of my earlier chapters; but some of the very finest shots have adopted the most extraordinary positions. Thus Roberts, who is well known all over Europe as a splendid amateur shot, stoops so low that it really looks as if he were trying to get the butt of his gun on to the top instead of the front of his shoulder. Another splendid shot, generally known among his shooting associates by the name of "Bummer," appears not to be able to shoot at all unless he gets the sit down part of his body stuck out at right angles to the rest of his anatomy; hence his cognomen. Another very fine trap shot in England, "Turner Turner," leans so much forward, that if by accident his second barrel misses fire, he has great difficulty in keeping from tumbling on his nose.

Here, in America, as a rule, a man's position at the traps is more natural and better than with shooters in England, though here, too, there are grotesque exceptions, but these are not usually to be found among the best shots.

To a beginner, I would say, study to adopt the position in which some very good shot stands and holds his gun; but choose for a model one who stands as though nothing could throw him off his balance, and who looks unconstrained and easy.

I know no finer shot in America, considering all things, than Edgar Murphy, the blonde giant of New York, and I know of no man who stands up better and looks more like a man that means

business than he does when he takes his place to shoot a pigeon. It is worth going to see him shoot to learn how to stand and how to handle a gun. Watching a good shooter will also teach a novice the right time in which to shoot both his first and second barrel, varying the time of each with the various qualities of the birds and their various flights.



CHAPTER VII.

Centering a Bird With a Charge—Gathering Birds.

I wish to refer to a subject that is of great importance, but is usually thought little of; that is, centering your birds with your charge.

Do not be content to bring your bird down and gather it. It is true, it counts a dead bird, but never be satisfied with any shot you make unless you are sure that you had the bird in the center of your charge.

In nine out of ten crossing shots, the birds, even though gathered, are shot with the outer edge of the killing circle and not with the center. Don't be afraid of holding too far ahead; it is far easier to miss by shooting behind. A crossing bird at forty yards struck with the center of the charge, when a proper load and a proper pigeon gun is used, will double up and fall as dead as it is possible to see a bird fall.

A man who finds no fault with himself as bird after bird falls only partially killed, will soon miss a bird and then perhaps miss shot after shot. He will wonder why he is doing so and think he is holding the same as when he was killing. So he is, almost; at first he was getting his bird with the outside of the charge only; but later he failed to do even that. At first he was not leading enough, later he was leading much less.

So far, I have touched lightly on the points with which a beginner should try to make himself familiar. I shall now enter a little more fully into the details of various points connected with shooting live pigeons from the trap. First I shall take the question of gathering a bird after it is shot.

In England, and on the Continent, there are always good retrievers employed to gather the birds, and the rule there, is for the dog to be released the moment the shooter leaves the score, or before that if the bird is on the ground, whether the second barrel has been fired or not, time being given the shooter to use his second barrel if he wishes. There is no such thing as a time

allowance for gathering the birds. This custom, which gives every shooter the same chance, is one I should like to see universally followed in America—at all events, at all ordinary club shoots, thus preventing delay in trapping, etc.

The old rule, that the shooter can, at his option, call for either a man or a dog to gather his bird, and is allowed two minutes, and, at some clubs three, in which to have the bird so gathered, the time to be taken from the gun going off, has, I am glad to say, been changed at most of the New York and Philadelphia clubs, and the new rule adopts the English plan, doing away with time allowance. The new plan cannot, however, be properly carried out unless the dog or dogs used for retrieving are good ones at the work.

The old rule gives room for a good deal of exercise of judgment on the shooter's part, and many sweeps have been won or lost, and many matches decided, by that judgment being good or bad. A bird slightly wounded only will often be gathered by a dog when a man could never have done so, because a good dog will rush so quickly on a bird that, if it is sluggish in rising, the dog will catch it in the act, or even in mid-air. This is especially the case with what are termed body shot birds or those with a wounded leg. Body shot birds are those which, being hit in the body, but having no wings broken or vital organ touched, are, perhaps, bleeding internally, and, therefore, although able to fly, are slow and weak; but where a bird has dropped near the boundary line, and especially when that is a plain string or wire only, or a wire fence less than three feet high, which is usually the case, a man can go round outside the boundary and drive the bird, which, perhaps, is able to fly a few yards, towards the center of the ground and so gather it; whereas, a dog going straight to the bird, would very likely drive it beyond the boundary before he caught it.

Also, in the case of a bird which has been shot in the head, and has, therefore, very likely become blind in one eye. A man can see, as he gets near, whether such is the case, and, by creeping up on the blind side, can grasp the bird on the ground; although, if he had attempted to approach from the other side, the bird would easily have flown out of bounds.

Sometimes a bird has its wings injured in such a way that, although able to fly a little, it cannot fly either far or fast; such a bird can get away from a man, or keep him running until after the time allowance has expired, whereas a dog could run it down and catch it at once.

Speaking of this reminds me of a curious sight I once saw at an important shoot at Philadelphia. The bird was badly wounded and had alighted or fallen within the boundary. The shooter waited for some time to elapse and then called the dog. The dog, as he approached the bird, in place of rushing in and seizing it as usual, and as he had been before in the habit of doing, stood on a point at it and refused to move, and it took the united efforts of a man and a boy pushing behind to make the dog get up to the bird and gather it before time was called by the referee. Later, in the same match, the same man called for the same dog under much the same circumstances, believing that the dog would not repeat his first performance. The dog again came to a dead point and it was amusing to watch the agony of mind of the shooter as the referee kept calling, "One minute gone; one minute and a half gone." And yet no effort would force the dog on. At last he made his rush, but at the same moment the referee called, "Time!" and the bird, though gathered within bounds, was declared "Lost bird." When a bird has been shot in the body it sometimes happens that, though seriously wounded, it is yet capable of flying fast and strong; but if it is still within the boundary, by giving it the full time allowance, it may bleed to death. In this case, judgment is required as to whether it is best to risk alarming it by letting the man get near and watch it till time is nearly up, or depending on the quick rush of the dog at the last moment. In the latter case, the shooter should always look to see if the dog is watching the bird and seems eager to go, and to see that no one gets between the dog and the bird, and that his attention is not called off.

There also comes the question: Is the dog a good, fast, reliable retriever, and does the man who is doing the gathering know anything about it? Every man thinks he can gather a bird, but few are really good at it.

There are three secrets in gathering a wounded bird by hand

which are not generally known, and the knowledge of which makes some men wonderfully good at it.

First. The fact that nothing frightens any wild animal so much as the direct glance of the human eye.

Second. That most animals will let you approach them very closely, if, instead of going directly toward them, you circle slowly round them sideways, so as to make them believe you are going to pass them by.

Third. That a pigeon is watching your hands as you prepare to grasp it, and will invariably spring the way its head is pointing, and if you try to put your hand on it, you will probably only succeed in touching the tail feathers as it starts, the first spring being very rapid and elusive; but if you grasp at a point a foot or so beyond the pigeon's beak, you will find that you have a secure grasp of it.

Knowing these three points, a good gatherer circles round or half round his bird, keeping his side toward it all the time, watching it out of the corner of his eye, but avoiding catching the bird's eye, and moving slowly and smoothly. When close enough, he sinks his body gradually toward the bird till his hands are near enough for a sudden lightning-like grasp at a point well ahead of it.

When a boy, I caught many rabbits, crouched in their form in the grass, in this way, which had not even been shot at; but if I once let my eye meet that of the rabbit's, he was off like a will-o'-the-wisp. All wild animals are more or less the same in this respect. Take a ruffed grouse. How often one is seen crouched on a ledge of rock within a few feet, its plumage so like the rock and dead leaves that no one but a hunter would detect the shape of this game bird; but the moment your eye catches his, he feels he is discovered, and the place that knew him knows him no more.

Before I leave this subject I would caution young shooters against making too sure that they have killed their bird with the first barrel, and so either not shooting the second or being careless in doing so. I have often seen old seasoned pigeon shots taken in by the apparent killing of a bird. I remember on one occasion when a match at 200 birds to a man was taking place at

the Westminster Kennel Club grounds, at Babylon, L. I., that three birds were lost in the first 100 shot at by one of the oldest members and best pigeon shots of the club; each of these pigeons had been slightly hit with the first barrel only and knocked down within thirty-five yards of the shooter, who each time missed the bird clean with his second barrel when it was stationary on the ground, thus allowing it to escape. The match was for \$1,000 a side.

On another occasion at the Hurlingham Club, London, England, a member of the club, who was generally considered to know more about pigeon shooting than any two men on the ground, though a poor shot himself, bet £100 to £5, or \$500 to \$25, that a bird shot at, and which to all appearance was stone dead, would be gathered. The shooter, who had laid a heavy bet before he went to the mark, that he would shoot this bird, accepted Mr. Gambier's bet, and the next moment as the dog reached what appeared to be a mere inanimate mass of fowl and feathers, to everybody's astonishment, the bird rolled over, sprang clear of the dog, and flew over the boundary, leaving Mr. Gambier to pay his \$500 and look as pleasant as he could under the circumstances.

If, as is probably the case, the shooter is using a very straight stocked gun, it is always advisable to shoot at the feet of a pigeon on the ground; you will then get the bird in the center of the charge, and a dead bird will be the result. If, however, there is a strong cross wind blowing, remember that your shot will drift with the wind before it reaches the bird, and hold 3, 6 or 12 inches, or even more, to right or left, according to strength of wind. If the gun is not a very straight stocked one, then aim fairly at the center of the bird.

CHAPTER VIII.

Judgment on Calling Birds.

The question of calling, "No bird," when a bird does not at once fly on the trap being opened, is one which requires better judgment in this country than in England. There, as I have previously remarked, the birds are so very much faster than here, this judgment is unnecessary. As a rule, the shooter has less chance at a sitting bird than at one that leaves the trap at once.

Some very good shots make it a rule always to call, "No bird" to a sitter, but this is, I think, a mistake, and a man handicaps himself by doing so without any sufficient reason. A little study will enable a pigeon shooter to discern the difference between a sitter, which, when it springs, is going to go off with a really rapid and perhaps twisting flight, and one that, when it does fly, will move slowly and give an easy shot.

Another point worth remembering is this: The poorest birds, those that are either gorged with too much food or are faint for want of it, and those that are so tame that they don't see any particular reason for flying away, will generally fly toward you. Those that have been trodden on by their mates in the basket, and those that perhaps have been injured in catching or trapping, are the sitters, and none of them will prove difficult to shoot when they fly.

On the other hand, the strong, lusty birds will usually be out of the trap before it is fully open and be speeding on their way, zigzagging perhaps in their flight, as if they knew that a charge of shot was coming after them. The quick, perky looking bird, with his head turned away from you, is the one to cry, "No bird" to, as quick as lightning; at the same time throwing your gun up, so there shall be no mistake about your meaning. Don't waste a moment, or he will be off before you can get the words out, and then, whether you are prepared or not, you must take him.

If you see the bird sitting in a confiding sort of way, especially if he has his head toward you, keep your gun to your shoulder, the muzzle pointing just over the bird's head, and as he makes his spring, let your gun follow the movement and pull the trigger, and you will rarely score a miss with the first barrel. Sometimes several seconds may elapse before the bird can be made to fly; keep a very close watch upon him and if, as happens sometimes, you see signs of his becoming what you may term a dangerous bird, at once call, "No bird." These signs are: turning his body quickly round so as to face away from you; giving a quick shake out of his tail feathers; moving his head quickly from side to side, etc. Another thing you must watch against is that your arm does not get tired keeping your gun in position to fire, or that your eye begins to water from perhaps facing a cold wind; in either case at once call, "No bird."

Sometimes a bird rises from the trap, but alights again before the shooter has time to fire. A bird which has once been on the wing cannot be called, "No bird," but must be taken by the shooter. In this case use your judgment, and if the bird looks likely to fly fast when he again takes flight, shoot him on the ground before he makes his second start, thereby making, "No bird" of him and you will be given another in his place.

I will here speak of the other times a shooter may call, "No bird" and refuse the bird pulled for him. These are five in number, and are as follows:

First. When two or more birds are liberated at once (of course, I am not speaking of double rise shooting), this will happen occasionally from the traps being out of order; when it does, the shooter has the right to take either of the two birds so liberated or call, "No bird," and have a fresh trap pulled. Here it is not necessary, according to the rules, for the shooter to call, "No bird," instantly; but he may use his judgment as to whether either of the birds is an easy one to shoot; but if he fires he has to abide by the consequences.

Second. If, when the trap is pulled, although the bird should leave it, yet if the trap has not fully opened, the shooter may call, "No bird." Here again he would be guided by whether the bird was a hard one or not.

Third. If the trap is pulled before the shooter called, "Pull" or was not pulled at once on his saying, "Pull," in either case he is at liberty to call, "No bird," or to take the bird at his option.

Fourth. If the shooter finds at the moment of his calling, "Pull," and before he has time to fire, that the dog is loose and running into the field, or there is danger of his doing so, he may call, "No bird."

Fifth. If, in the act of shooting he is in any way balked by any person on the ground, or by the dog running against him, he may call, "No bird."

The first of these five only is actually mentioned in most sets of rules; but the others come under the head of being balked by antagonist, looker-on, trapper, or dog, which is the wording commonly used in the rules provided by the best clubs in America.



CHAPTER IX.

Some of the Causes of Bad Shooting.

In an earlier chapter I spoke of the very small matters which, by taking off a shooter's attention, are likely to cause him to shoot badly. Among these are, sore finger, from the recoil of the gun causing the trigger of the right barrel to cut the forefinger, or the trigger guard to cut the middle finger of right hand; or the shooter's cheek is bruised and made sore; or his shoulder suffers in same way. It is very bad policy to disregard these matters, slight as they may appear, for they will assuredly have an effect on a man's shooting, though he himself may not realize that such is the case. The remedy for the first of these is to have the trigger of right barrel rounded so as to remove any sharp edge; or, better still, have it made to work on a pivot, so that while absolutely firm when pressed back, as when pulling gun off, yet it is free to swing forward if pushed the other way; or an India rubber guard may be used on the finger; though this is likely to interfere with the shooting, and cannot be recommended except as a temporary matter; and the same can be said of a glove. In the case of the middle finger, the remedy is to have the rear part of the trigger guard rounded and made smaller, which is very easily done; and also, if that is not sufficient, to have a piece of chamois leather or India rubber tubing fastening around it.

As regards the cheek, there is nothing like having a small pad of soft, smooth leather, with some stuffing underneath, let into the gun stock at the spot which touches the face. In many cases I have known this pad to very much improve a man's shooting, even when his face had not been hurt by the recoil, as it takes off the jar caused by recoil of first barrel, and enables a man to use his second quicker and with greater precision.

When the shoulder is bruised, nothing will remove the soreness so quickly as two or three applications of arnica applied with the hand or a brush, without the addition of any water; and to prevent a recurrence, either have the stock slightly lengthened, which will usually prove effective, or use a recoil pad.

Many old shooters are under the impression that a gun held very lightly in the hands and not pressed against the shoulder at all will give a very violent blow to the shoulder if fired. This, however, is not the case and it is useful sometimes to know this. For myself, in targeting a gun or shooting at a sitting object I always hold my gun loosely and scarcely touching the shoulder, as otherwise I feel the blow of a heavy charge on my shoulder too much for my comfort.

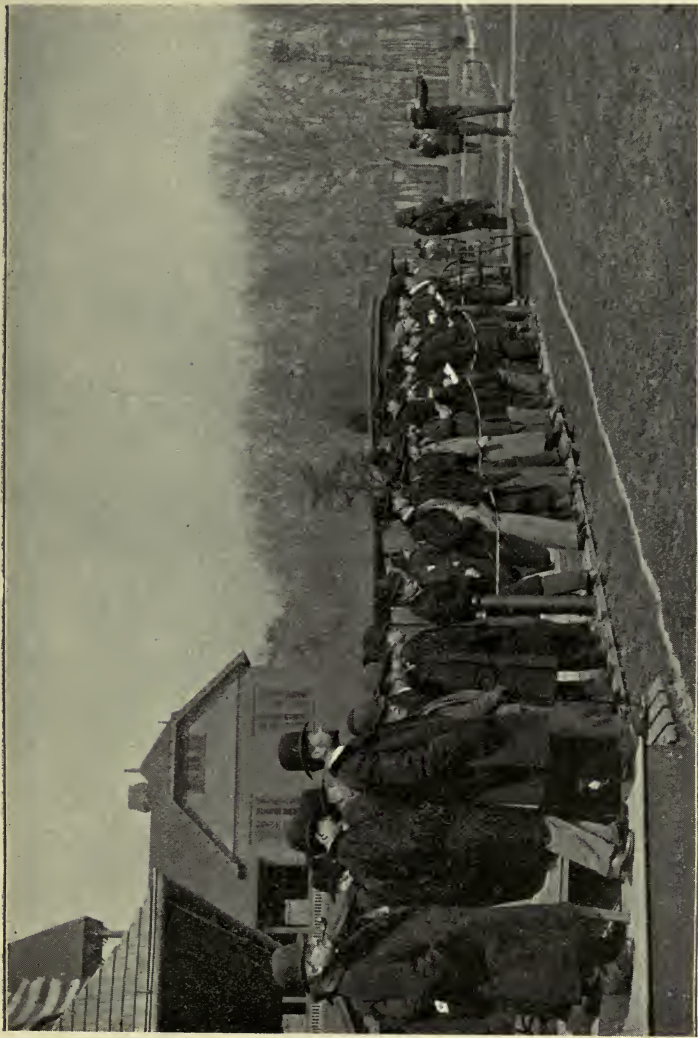
There is a slight loss of penetration when a gun is fired like this, and if targeting for penetration, I should hold it as firmly as possible, or if anxious to make a very long sitting shot.

The man experiences most recoil who holds his gun just firmly enough to take all its weight on his hands and have it pressing just hard enough against his shoulder to get the full blow.

Among the things which affect shooters is the question of light. I do not so much mean a good, strong light, sunshine as opposed to a dark, foggy day, as the sudden change of light which sometimes takes place, and is quite unnoticed by the shooter until he finds himself missing a bird in a way that he cannot account for.

This happens more frequently in a climate like that of England than in America, and is, of course, more noticeable where the birds are very fast, than where they are sluggish; but I have seen it happen again and again in this country, and I have never heard any good explanation of it. A number of good shots are shooting and killing all their birds; suddenly one misses, and immediately there are four or five misses, with no apparent reason for them. If you question the shooters, you will hear such remarks as "I was holding dead on; I cannot account for it," etc.

I remember seeing a very noticeable case of this sort at the Gun Club, Notting Hill, England, where a valuable prize was being contested for by the best crack shots. Suddenly there were no fewer than six successive misses by six different shooters; and yet there was no change in the light that anyone could easily notice. It created a good deal of comment at the time.



WESTMINSTER KENNEL CLUB GROUNDS

By Courtesy of The Illustrated American

I can suggest no way of guarding against this state of things; but if you have any reason to think that the light has changed, and is making shooting more difficult, especially if there has been some unaccountable missing before it is your turn to shoot, take every possible precaution, and shoot rather quicker than you usually do. I have always found in my own experience, and I have noticed it constantly in that of others, that where any cause exists which makes birds more difficult to shoot than usual, the man who trusts himself to shoot quickly, without waiting for anything like a deliberate aim, is the man who comes out ahead.

I have sometimes thought that with some conditions of the atmosphere the air has the same effect on an object that water has. We all know the effect of putting one end of a stick under water, while the other is still held in the hand. The stick appears to be broken at the point where it enters the water, and the end furthest from the hand is some inches out of the direct line. If I am right and such is the case, a shot fired straight at a bird under these conditions, with a full choke bore gun, would nearly always miss, if held correctly. In no other way can I account for some of the missing which I have seen done by one good shot after another at particular times.

While on the subject of unaccountable missing, I will say something of the effect which the irregularities of shooting grounds may have on the shooter; I refer to grounds so situated that there is a rise or slope to the background. There are few men who do not find they can shoot better on some grounds than on others. The slope of the ground over which a bird is flying may give the shooter a very erroneous idea of a bird's true flight. For instance: Supposing the ground is perfectly level; the eye at once catches the true flight of the bird; but if it slopes gently downward, and the bird follows the slope in its flight, it will appear to the shooter that the bird is keeping a level course, and he will shoot over the bird, unless he allows for the slope of the ground. In the same way he will shoot under or behind a bird that is flying over rising ground. To prove to yourself how easily this may happen, go on to almost any ground that slopes slightly, either up or down, stand at say thirty yards from

the traps, and cast your eye over the ground beyond; perhaps it will even appear to you that the ground is level, but in no case will the true rise or fall of the ground be apparent to you from that distance.

Then walk up to and a little beyond the traps, and compare what you then see with what you saw from the thirty yard mark, and at once a great many of the missed birds will be accounted for to your mind.

A background of slopes and rises will have, to a great extent, the same effect; in addition, it will make a great deal of difference to the shooter what colored background he has, when a dark bird is flying against it. He can see the bird, but he cannot see it plainly enough to exactly and instantly gauge its true flight at the moment of firing.

You must remember that to kill a bird flying down hill you must shoot below it; by so doing the bird will be in the center of the charge when the shot reaches it, and in the same way with a bird rising or flying up hill, you must shoot above it to kill. Take a piece of paper and draw a straight line, representing thirty yards, to the traps; then draw a slightly sloping line from the traps downward; then put a dot for the bird, following that line; now draw the line, which would be the line of your shot, from the shooting mark to the spot your bird is; prolong the line showing slope of ground and the line of shot, and see how they diverge as the bird increases its distance from the trap. But how much more is this the case if, as is likely, you have not noticed the slope in the ground, and you fire as though the bird were following the same level as exists between yourself and the traps. Then try the same plan with an imaginary ground, where the slope from the traps is upward and not downward. No doubt some men's sight is much more affected by this matter of slope of ground than others.

Nothing is more difficult in pigeon shooting than to detect a slight divergence from the direct line of flight. Every day you see it; a bird appears to be flying straight away from the shooter, but is very slightly inclined to the right or left. You fire at it as though it were keeping in direct flight, and cannot think why you did not kill it. This is especially the case with incomers.

The pigeon appears to be flying about the same level as it comes in toward you, but is really rising as it gets nearer to where you stand. You do not notice this slight rise, and therefore shoot under your bird, and as he is within a very short distance of the muzzle of your gun, and the whole charge is going in a ten-inch circle or less, you the more easily miss it. Some men never seem to get over this difficulty in gauging the flight of incomers, because they never find out what is wrong in their judgment.

Another bird that one may often see missed is a very slow bird; one that perhaps has been wounded by the first barrel and is flying slowly within a foot or two of the ground. This class of bird is constantly missed because it appears to be flying so slowly that the shooter is afraid of firing too far ahead of it, whereas it is really getting over the ground faster than is apparent, and I have noticed that no one ever does shoot too far ahead of a bird of this sort, but if missed at all, it is invariably from the shot passing behind.

A common fault with shooters and one which a man is apt to get into, especially in this country, where you are likely to get a good many slow birds and then perhaps a very fast one, is when an extra fast bird leaves the trap, to dwell on it with your first barrel; whereas, you ought to be just so much quicker, not only because you are really more likely to kill him with the first, but because, failing with your first, you have so much more chance with your second, as the bird has not had time to get out of range. I could name several men who are now shooting and who are splendid shots, but who carry this fault so far that you can safely predict that whenever they get a succession of very fast birds, they will kill fewer of them than some other man who is nothing like as good shot, but who has not fallen into this bad habit.

A very noticeable case was when, in the winter of 1893-94, a team of four shooters from New York, went to shoot against four members of the Riverton Gun Club, of Philadelphia. The New York shooters were George Work, Edgar Murphy, Fred Hoey and Capt. Money. The Riverton team consisted of Chas. Macalester, Yale Dolan, Tom Dando and Bob Welch. The Riverton Club shooting ground is very much exposed to the wind, which, on the day of the shoot, was blowing a stiff gale from directly behind

the traps, making the birds, which were a picked and very fast lot of themselves, direct drivers. The men of the New York team all shot in the same style, letting the first barrel off the moment the bird took wing, and following almost as quickly with the second.

Those of the Riverton team, who, up to that time, had been quite invincible, tried to make sure with the first barrel, and in consequence suffered a very crushing defeat, not one of their team being within a good many points of the score of the lowest on the New York side. These same teams competed again a few weeks later at the Westminster Kennel Club grounds, on Long Island, when fortunately, I think, for the New Yorkers, there was again a strong breeze blowing behind the birds, which made them very fast, and once more New York won.

Nothing is easier than for a man, without his knowing that he is doing so, to acquire a bad habit of one sort or another, which may, in time, very much affect his shooting, and which, when once acquired, may be difficult to get rid of.

The most frequently acquired of these is that of stooping or leaning forward when shooting, which arises from an over anxiety or nervous wish to kill, or getting into a nervous, jerky way of throwing the gun up, getting too deliberate with the first barrel, or too snappy (equally bad faults). A man should be on the watch against these faults, always, as long as he is shooting at the traps.

CHAPTER X.

The Best Loads for Pigeon Shooting.—Velocities.

We will now come to the much debated question of what is the best load for pigeon shooting.

I would first lay down this point, that no argument as to what is best for game shooting applies here. No man would wish to carry home a bag of game so riddled with shot that it was practically worthless for culinary purposes; but this is just the charge you require when shooting at the trap, as otherwise many of your birds would escape over the boundary.

The charge used for pigeon shooting, is, by the rules of most clubs, unlimited as to powder, but limited to $1\frac{1}{4}$ ounces of shot.

The shooter, therefore, must decide: First, whether the $1\frac{1}{4}$ oz. shall be used, or less; secondly, what amount of powder will give the best result with the quantity of shot chosen.

As regards the first of these questions, it stands to reason that if there is no good argument for using less than the full quantity allowed, it must be better to have every pellet permissible, both because by doing so you get a larger killing circle, and also because there will be more shot pellets in that circle to stop your bird.

But there are three arguments used by many trap shooters in favor of the smaller charge, which is usually put at $1\frac{1}{8}$ oz. First, that the full charge of $1\frac{1}{4}$ oz. does not travel so rapidly through the air as $1\frac{1}{8}$ oz. of the same sized shot, and therefore the shooter has to lead a crossing bird more, and has not such a good chance with a fast direct driver; secondly, that the full charge causes too much recoil, and by throwing the gun off the line of flight of the bird when first barrel is fired, makes it harder to put in as speedy and efficient a second; thirdly, that the outside pellets of the charge with the heavier load have little penetration, travel up slowly, and are practically useless. All of

these objections are urged by men who have had much experience and are good judges. There is also a fourth argument, which, however, does not always apply, and that is, that some guns shoot a poor pattern with $1\frac{1}{4}$ oz. of shot, while making a good one with less. This last argument, which, however, has its reverse side; viz., that some guns which make a good pattern with $1\frac{1}{4}$ oz. make a bad one with $1\frac{1}{8}$ oz., is, as regards that particular gun, unanswerable. I do not think myself that the question of velocity, especially where you have made sure of having a velocity of close to 900 feet per second or over, sufficiently counterbalances the advantage which is gained by having a larger killing circle and more pellets striking the bird.

The question of recoil is one not so easily disposed of. There are many men to whom the recoil of $1\frac{1}{4}$ oz. of shot would be uncomfortable, giving them a sore shoulder and interfering with use of the second barrel. Such men must be content to use a lighter charge; but to the man who presses the gun firmly to his shoulder, so as to reduce the recoil to a minimum, and holds his gun with so firm a grip with both hands that he is not handicapped in the use of his second barrel, I say, use $1\frac{1}{4}$ oz. of shot.

I may here mention that occasionally a gun is found that gives no more recoil with the heavier than with the lighter charge, or so little more as not to be noticeable; also, that the recoil can be materially lessened by using softer wadding between the powder and the shot, and a very thin wad over the shot.

The third argument, as to outside shot having little penetration, I do not think counts for much, for my experience has shown me that this is by no means the case with all, or even with a majority of guns, and if there is a slight loss, they have sufficient force to kill, if only a sufficient number strike the bird.

There is still another argument, and one which I am very anxious to see thoroughly tested, but up to the present time I have had no opportunity of doing so. That is, that if you put as much as $1\frac{1}{4}$ oz. of shot into a 12 bore gun, you will get bad stringing of the charge, whereas with only $1\frac{1}{8}$ oz., the whole charge would go up in one mass. If this is so, and I am inclined to believe it is, then not only is it no advantage to have the extra $\frac{1}{8}$ oz., but a decided drawback.

Next comes the question of how much powder? Few, if any, of the crack pigeon shots use less than 50 grains of "E. C." or its equivalent in other powders. I mention "E. C." as it is the powder now in most general use by the crack pigeon shots, both in America and on the other side of the Atlantic, and was used by Armin Tenner, the expert on ballistics, in his late tests at the American Testing Institution, as the standard powder. Macalaster, Work, Murphy, Welch, Hoey, Dando, Money, Elliott, Morfey, Budd, Parmelee, Grimm and scores of other cracks, both amateur and professional, use this powder, and in almost every case use the charge I have named, or thereabout, when they want to put in their best work; but it is what may be called a punishing charge, and it is not every one who would care to fire two or three hundred shells out of a $7\frac{1}{2}$ lb. gun with that load in one day.

Of the names mentioned above, Work and Welch each hold an amateur record of having killed 98 out of 100 birds in first-class matches at 30 yards rise, with a 50 yards boundary, and Elliott of having killed 100 straight in his late match with Carver, following it up on the next day with 99 out of 100. On the other hand, there are men who are daily doing great shooting with only as much as 42 grains, and some wonderful scores have been made with this charge.

It used to be considered an axiom in shell loading, that increasing the charge of powder opened the pattern, and was apt to give wild shots and create balling; but experience has shown that with modern guns the heavier charge of powder often holds the charge of shot together and gives closer patterns than with a smaller charge.

The way in which a shell is loaded, and the wadding used, has very much, of course, to do with this, and later on I shall give some hints on shell loading which may, I hope, correct some misapprehensions and be of use.

Speaking of velocities reminds me that it must not always be taken for granted that a heavy charge of powder gives greater velocity than one less heavy and more suited to the gun in use. Each gun seems to have its proper load, and if you exceed this, the pressure caused by the formation of gas is exerted in a lateral direction, and does not impel the load with any greater force.

The question of velocity is an important one in all kinds of shooting, but being especially so in pigeon shooting I cannot help referring to it from time to time.

Few people are aware how much difference there is in the velocity of a shot fired under different conditions of temperature. Everyone knows that shot is propelled out of a gun by the gases which form on the ignition of the powder. Powder of all kinds, black as well as nitro, not only ignites much quicker when it is warm itself, and all its surroundings are warm, but its gases are also more fully developed under these conditions; therefore, in cold weather keep your gun as well as your shells, warm, if possible. The moist warmth of the body, which is imparted to the shells if they are carried in the pocket, is very good in this respect. On the other hand, if shells are left exposed to the rays of a very hot sun, or allowed to bake near a hot stove, they are likely to become abnormally strong, and pattern as well as velocity may suffer in consequence.

Recent experiments have taught us many things that our ancestors never dreamed of; one of these is that powder can be made to give out its gases so quickly that it will force the shot from the breech to the muzzle of the gun with amazing rapidity; but that the load afterwards loses velocity as it travels so fast, that by the time it has reached, say, forty yards from the muzzle, it is moving much slower than a charge fired with a slower burning powder, and this difference increases the farther the two charges get from the firing point.

When a man is shooting with one of the powders I speak of, this quickness of ignition and action is very perceptible and pleasant to the shooter; but he soon finds out from experience that, in gaining quickness at and near the muzzle, he is losing it where he most wants it, further away; and though he may make some long kills, he would make many more with the powder which, while beginning slower, catches up and overtakes its volatile antagonist, and reaches the 40 yards mark before it, and keeping up its velocity, can be depended on every time at distances of 50 yards and over. These fast burning powders also strain the barrels and mechanism of a gun far more than the others.

But to go back to large and small loads. You cannot use $1\frac{1}{4}$ oz. of shot with advantage unless you have a heavy charge of powder to propel it, as otherwise you must of necessity get too low velocity.

Having satisfied yourself that you wish to shoot with a $1\frac{1}{4}$ oz. load of shot, you must find out what charge of powder will, in your gun, best suit that quantity of shot. With different guns this will be found to vary from 48 to 52 grains; but if less than 48 grains is used, I would advocate $1\frac{1}{8}$ oz. of shot. This load, as I said before, is a heavy one for a $7\frac{1}{2}$ lb. gun, and intended to be so. It ought not to be used, except in a very strongly built gun of that weight and one which is made of the best material; and even then it will, in course of time, shake most guns and necessitate their being sent to a gun-maker to be closed up.

It should always be borne in mind that nitro powders are strong powders; that they are intended to be as strong as the best and strongest black powder ever manufactured—and that I take to be Curtis's & Harvey No. 3 or No. 4—and no one would expect to use such a charge of either of those powders for long, in such a gun, without its showing signs of wear and tear.

If, after reading this, any one is still of the opinion that he can shoot as many pigeons, and gather them within bounds, with a light load of powder and shot, as he can with a heavy, provided he is physically able to use the heavy, let him shoot with a man who is as good a shot as himself, but no better, on a windy day at strong birds at 30 yards rise, and let the latter use a 10 bore gun with 50 grains of "E. C." powder and $1\frac{1}{4}$ oz. of shot, and see whose load does the most execution.

While writing on this subject of heavy loads, I should like to say something as to the question of safety to the shooter and his gun when using nitro powder, as compared to the old-fashioned black powder. Having myself used nothing but black powder for the first twenty-five years after I began to shoot, and having used nothing but nitro powders for the last twenty years, and having during the whole of this time been in the habit of mingling among shooters of every sort and kind,

and been a constant reader of all newspapers which treat of shooting, I feel that I am entitled to give an opinion on this point. I unhesitatingly say that fewer guns are injured nowadays with nitro powders than used to be injured with black, when that powder alone was used.

Two years ago, when paying a short visit to London, England, I asked the opinion of several old time gunmakers, whose memory could carry them back on this subject at least as far as mine, and, as I fully expected, found that their opinions coincided with mine, and not only so, but two of them added that guns were, as a rule, now made far lighter than they used to be, while there were far more 28, 20 and 16 bores in use, most of which were built as light as it was possible to make such guns; and yet people insisted upon using heavy charges in them.

I have before written on swing and lead, in shooting at crossing birds, but I want to add a little to what I then said.

The theoretical shooter is seldom a good shot; but theory may sometimes be of great use to a shooter in helping him to arrive at a correct solution of some of the difficulties which he meets with in practice. For instance, if you ask most shooters how far they try to hold ahead of a crossing bird, their answer will usually be very vague, and they have no correct notion of what the length of their lead should be; but if you work out the average speed of a crossing bird at, say, 40 yards away, and the length of time it will take for the shot to reach 40 yards from the moment it leaves the muzzle of the gun, you will have acquired a very valuable bit of knowledge, which in later practice you will find very useful.

Many authorities on shooting have from time to time carried out experiments, with a view of finding out the average speed at which different species of birds fly, and most works which have been written on shooting contain a table giving the result of these experiments.

From these, it appears that the crow, which is a slow flying bird, is credited with a speed of 40 miles an hour, while some of the most rapid flyers among the wild ducks, such as a canvas back, are given a speed of from 90 to 100 miles an hour. Now, there is little doubt but that a pigeon usually travels faster than 40 miles an hour when leaving the trap, but for the sake of

illustration we will call it 40. As we know just how long it takes a charge of shot to travel 40 yards, all we have to do is to see how far a pigeon, flying at the rate of 40 miles an hour, will have flown during the time it takes the shot to reach him from the moment it leaves the muzzle of the gun. The answer is just 8 feet. You should, therefore, lead your bird 8 feet to get it into the centre of your shot.

And exactly in proportion to the greater rapidity with which a bird is flying over and above 40 miles an hour, by just so much more must you lead that bird. Thus you must allow 16 feet for a bird flying 80 miles an hour, and more even than that if the bird is more than 40 yards from you; while, of course, you need not lead it so much if the distance is less than 40 yards, or if it is not flying across at right angles, but is inclining away from or toward you.

These figures have been worked out so often that there is no doubt as to their correctness, and I think the shooter who realizes what they mean in actual practice, will say to himself, "I'll hold further ahead of my crossing birds in future; higher over my rising ones, and more under a dipping bird." And so sure as he does, he will have fewer misses scored against him.

Remember, however, that this matter of leading is not all; there is the time occupied in making up the mind as to the direction the bird is traveling; then the time occupied in pulling the triggers, the time it takes for the hammer to fall on the striker, for the striker to ignite the primer, the primer to ignite the powder, the gas to form, the charge of shot to get under way and reach the muzzle.

All this time the bird has been speeding on; but if your hand and eye are true, you have been swinging your gun with him and covering him, and now, if you give the right amount of lead, you will see him fall to your shot; only be sure that at the moment you press the trigger you do not stop your gun, and so lose your lead.

Swing cannot, of course, affect the shot after it has once left the muzzle, but when you are pressing the trigger it has not yet done so, and many more shooters than know it themselves do stop the gun as they press the trigger.

CHAPTER XI.

Loading Ammunition for Pigeon Shooting.

We will now come to the most important question of shell loading.

You may be a magnificent shot, and have the best gun in the world, but if your shells are badly loaded, you will do no really good shooting.

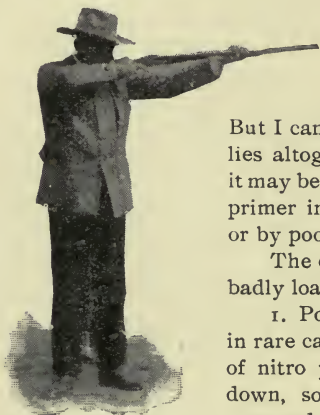
All nitro powders require a strong, hot flash to explode them properly. This can be obtained with an ordinary shell which is not intended for use with nitro powder, by putting in a small pinch of fine black powder first, as a priming, and then loading the same as in any other shell especially made for nitro powder, but a shell made especially for nitro powder with a strong primer should always be preferred.

All guns are chambered at the breech to take a shell of a special length; but it is now customary to so gradually slope off the shoulder of this chamber, and taper it into the barrel proper, that a shell of almost any length may be used, with good results, therefore, if a shooter wishes to use a heavier load one day than another, and there is not sufficient room in the shell for that load, he can, provided his gun is bored as I have said, use a shell of a size longer, and vice versa.

This is far better than the plan usually adopted of using less wadding to make room for the larger load or filling up with extra wadding where the load used does not fill the shell sufficiently.

Never allow your shell to be so full that you cannot get a quarter inch of crimp, if possible; although, if you are obliged to choose between sacrificing one of the three waddings (which you should always have over the powder), or doing with less crimp, choose the latter; yet it will usually be found that by putting a little more pressure on the powder itself, and then on the three wads over the powder, you will get room for your charge and a good crimp also.

Metal shells are not recommended for nitro powders in shot guns, because the crimp is not secure and regular on the over shot wad, and does not hold back the shot while the gases are forming in the base of the shell.



MR. GEORGE WORK.
By Courtesy of The
Illustrated American.

In Mr. W. Greener's book on shotguns, he says, at page 79: "Occasionally bad patterns, or patchy patterns, prove the gun to be improperly bored."

But I cannot agree with him that the fault lies altogether with the gun, for I know that it may be equally caused by a bad, irregular primer in the shells used, by bad loading, or by poor, uneven powder.

The chief ways in which a shell can be badly loaded are:

1. Powder not sufficiently rammed, or, in rare cases, rammed too hard. (A charge of nitro powder should be firmly pressed down, so that if the over powder wad is removed, the powder has to be disturbed with the point of a knife, or something of that sort, from top to bottom, before it will shake out, but not so hard that any of the grains are broken).
2. Not sufficient wadding over the powder, or wadding that does not properly fill the shell and will allow an escape of gas around the edges.
3. Wadding not firmly pressed together, so that on the shell being exploded, there is an air space at once created over the powder, before the whole of the gases have formed. (Wadding will sometimes, after having been firmly rammed down, rise again and follow the rammer as it is withdrawn. This arises from the air still remaining under the wad, and has to be watched for and guarded against).
4. One or all of the waddings not being level when pressed down on powder. This is a common fault, and a very fatal one to good shooting.

5. When the metal re-enforcement of the shell is inside, and rises to above the height of the charge of powder, the wadding, in careless loading, is sometimes left resting on this ledge of metal, in place of resting on the powder, and thus creating a fatal air space.

6. Using faulty or inferior wadding.

7. Insufficient crimp, or crimp not being firmly down on to top wad, allowing shot to shake in shell.

8. The charge of powder or shot, or both, not being kept uniform, or not being the quantity represented or ordered.

9. Some unscrupulous shell loaders will use a poor, inferior make of shot, the pellets of which are not regular in size or weight, and some are misshapen. This shot can be purchased by them at a very low price.

If, while shooting, you can notice any difference in recoil, in the quickness of ignition, or in the report, you may at once suspect that there is a fault in the ammunition you are using, although the fault may lie in the lock mechanism or in the striker of your gun. To get regular shooting, it is necessary that the powder charge in each shell shall be ignited equally, and the primer manufacturers use all their endeavors to make the primers regular in their action; but to keep this regularity it is absolutely necessary that the blow on the cap containing the fulminate shall be regular in force and shall strike the primer fairly in the centre; if this is not so, the velocity as well as the pattern given by that gun will be irregular. Therefore, if you have a gun which gives you misfires, you may suspect that you are getting irregular shooting; or if you notice that some of your shells, after firing, show a deep indentation on the primer, while others have a very slight one—just sufficient to explode it, and no more—you may be certain that if you target that gun for pattern or penetration, you will get irregular results.

The right way to load a shell is as follows: Place the charge of powder in the shell; tap the shell, so that the powder will lie level; put one trap or field wad (*i. e.*, a wad with a glazed waterproof side), next the powder; press it down with the rammer until it is seated on the powder, taking care that it goes down perfectly flat, and seeing that it, as well as each subsequent wad you use, is

perfect in shape. Now with both hands on the rammer, for one moment put about sixty pounds of pressure on it; then put in a $\frac{3}{8}$ in. felt wad, and over it a black edge; put about the same pressure on these two waddings when they are both seated as you did on the first. Next pour in your load of shot, putting over it a thin card wad, and crimp down very firm. This all sounds very easy and simple, and so it is, and yet mistakes are made and shells are badly loaded.

I have said nothing about the apparatus used for loading shells. It is in the bad use of these that most of the errors which are so fatal to good shooting creep in. We will first take the ordinary dip measure. I have seldom found a make of measure that did not vary, and vary badly; therefore, before trusting to any measure, test it by weighing a charge of powder. All the various powder companies issue instructions for loading with their powder, in which they tell you what is the proper charge by weight, and its equivalent in drams by measure. The E. C. Powder Co., for instance, says 42 grains by weight (apothecary's) equals 3 drams by measure; therefore, 14 grains goes to the dram, 7 grains to the half-dram, and so on. So you can easily weigh any sized charge you wish, pour it into your measure, and satisfy yourself, so far as that powder is concerned, at all events, how far your measure is correct, and set it accordingly.

Now here you must bear one most important matter in mind; viz., that when measuring powder, the measure must not be shaken or tapped. It is quite easy to take a 3 dram measure, fill it with powder by pouring the powder in or lightly scooping it up out of a bowl, and then by tapping it make room for 3 grains or even more of powder, thus increasing your charge from 42 to 45 grains. In measuring powder, never shake or tap the measure you are using. Every shell loader should work with a pair of scales by his side, and from time to time test the charge he is loading, to see if it is what he thinks it to be; nothing but doing this will ensure your shells being loaded accurately and evenly.

Every maker of a loading machine or new style of measure will be ready to contradict this statement; but I have tried myself, or seen tried, every kind of loader, and I have seldom seen the one that even the most careful man might not go astray

with at times; and when you think that shells are often loaded by boys or men who know little or nothing about it, how much more likely is it that they should inadvertently fall into some error.

Jones' accuratus machine for loading is known over all the world, and is believed to be, and is, I think, the most accurate and best form of loading machine of its class that is made. I have at present two of these, and have had many more, and I can show anyone how very easy it is to go very much astray when using this machine.

As regards the shot, which, however, is of far less consequence, the best way is to have one of the shot counters which are made by most of the firms that manufacture loading machines, and can be procured through any good sporting goods dealer. These are flat trays with indentations, each holding one pellet of shot. By means of a movable slide, the tray can be so fixed that any number of these indentations are left uncovered. Should you wish to test your shot measure, you find out how many pellets of that make of shot go to the ounce, and fix the tray for whatever charge you require. You push the tray into a shallow box in which you have placed some loose shot, and on withdrawing it, you have each indentation occupied by a pellet of shot. These being poured through a funnel into the measure to be tested, show you at once whether it is correct or not. It must be remembered that different makers vary the number of pellets to the ounce in the different sized shot very materially. Any dealer knows how many pellets of any make of any sized shot go to the ounce, as they all publish tables showing this.

For rapid and good regular loading, nothing is better than the blocks which are used by most sporting goods dealers who loads their own shells, especially when these blocks are used as they should always be, with the apothecary's scales close at hand to test the load now and again.

I shall suppose you are using some form or another of block, for all other ways of loading by hand are, I think, tedious, compared to the use of blocks.

For quick loading it is very convenient with these to use a rammer which presses down five or ten wads at a time; but this

multiple rammer must not be trusted for putting the necessary pressure upon the powder, or even for pressing the three central wads together, for the reason that wadding varies very much in thickness, and if, as will often happen, one of the wads under the rammer is thicker than the rest, it follows that, while getting the right pressure on that particular shell, you have not got enough on the ones next to it; and further, you cannot give sufficient pressure with any but a single rammer, without using a blow, which is always to be avoided, as it packs the top of the charge, but leaves the powder in the base loose.

It requires a certain amount of practice to use any form of loader so as to get uniform results, and a beginner should always take a few lessons from some old hand at the business; but when once used to them nothing gives more regular and exact loading than well made blocks.



CHAPTER XII.

Conduct During Match Shooting—The Value of a Good Handler.

There are few more enjoyable ways of spending an afternoon than in watching a keenly contested match between two good shots, each man shooting at 100 pigeons from the 30 yards rise.

This is where character, coolness and determination come into play. Many a man who, day after day, comes out ahead in sweep shooting, and appears to be a better shot than his neighbor, breaks down more or less when it comes to match shooting, while very few men who shoot matches well are bad sweep shots, though such are to be found. To shoot a match well, requires that a man should have plenty of confidence in himself, and be able to take things as they come, without troubling his head about such a thing as luck. Nothing is more common than to see a man lose a match, for no other reason than that he had got into his head that he was being outlucked.

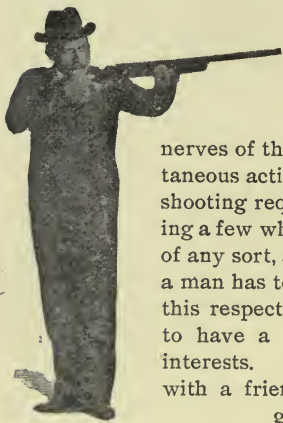
A match at 100 birds a man, usually occupies from two to two and one-half hours from start to finish; during the whole of this time the shooter's nerves are at full tension, and nothing should be allowed to distract his mind from what he has in hand; the match may be lost or won on a single careless shot, therefore, everything required during the match should be seen to and arranged for previous to its commencement.

The shooter should take care that his gun and shells are all in order, and ready to his hand; the same with any refreshment or stimulant he can possibly need. He should make every arrangement beforehand to guard against getting wet or cold, so that when he once commences to shoot, he can devote all his attention to the work before him. A little forethought in these matters, or the want of it, has often won or lost a match.

No absolute rule can be laid down about a shooter doing this or that, while the match is in progress, because men are so differently

constituted, and what will keep one man's nerves in good order will make another man nervous; but as a general rule, the less talking a man does while he is shooting, the better, and especially just before it is his turn to shoot. Also, he will most likely shoot better if he watches each bird that his opponent shoots at, so as to keep his eye accustomed to the flight of the birds, as well as the light.

If any one of my readers happens to be a cricket player, he will know that leaving the wicket, and especially leaving the ground when he is batting, takes his eye off and makes him far more likely to miss the next good ball he gets; and so it is with pigeon shooting; the eye gets used to instinctively following the flight of the birds, and gauging the direction and velocity of each one. He will also, if he is a good shot himself, see why his antagonist has missed, and avoid, perhaps, committing the same error.



MR. ROLLA O. HEIKES.
Shooting a Winchester
Repeating Shotgun.

It is difficult for anyone to keep a close watch through a roo bird match, and shoot as well at the finish as at the commencement; and most men require some little stimulant to quicken the

nerves of the eye and to keep up the quick, simultaneous action of eye, brain and hand which good shooting requires. Eating a bite of biscuit, smoking a few whiffs of tobacco, taking a little stimulant of any sort, are all good things in moderation, and a man has to find out what is best for himself in this respect. It is usual, when shooting a match, to have a friend with you to look after your interests. It is certainly better to be provided with a friend who is a really good judge of the game, and who will do this for you, especially where large interests are at stake. It is your friend's duty then to watch each shot, and call the attention

of the referee to any point that he thinks requires his decision or interference. You then leave all such matters absolutely to your handler, as he is called, and do not require to trouble yourself about them at all.

It is not usual for any dispute to arise, and yet there are so many little matters which spring up in pigeon shooting that cannot be foreseen, that no one can tell when some question may not arise which may require to be brought to the notice of the referee; and this should not be done by the shooter himself.

When shooting a match, try as far as possible to forget that it is one; as you go up to shoot each bird, try to feel and think about it just as you would if you were going up to shoot a practice or bye bird. When shooting a match I make a point of never watching the score, and I endeavor as far as possible, neither to know how many birds have been shot at, nor how I stand as regards my antagonist. All I think about is, trying to kill as many birds out of a hundred as I possibly can, and as a match-shooter I have been very successful, beating many men who could beat me in sweep shooting every day of the week.

To show how useful a handler may be, if he understands his work, I will mention an incident I saw happen not long ago:

An important match for a valuable stake was being shot between two old pigeon shots whom we will call A and B. The shooters were being handled by two men who have shot as many matches as any men in America. The scorer was rather new to the work, and as it was a bitterly cold day, was inside the puller's shanty. The match was about half through, and some hot coffee had just been brought for the shooters, handlers and referee. A went to the mark and called, "No bird," to a pigeon that did not at once fly on the trap being pulled. A shot the bird, and left the mark with his handler to get some coffee, while another bird was being put into the trap. There happened to be a little delay, and when A was going to the mark to shoot another bird, he saw B already there.

B and his handler as well as the referee, had been drinking coffee, and were not aware that the bird shot by A had been called, "No bird." The scorer probably did not know enough to say anything, and so the match went on, A getting the benefit of having scored as a dead bird one which, had he missed it, would have only been, "No bird," and not counted in the match. Here B's handler was of no use to him, from not paying attention. But I mention the case to show how useful a handler may be.

I could recall twenty such incidents, all of them materially affecting the result of the different matches they occurred in, and no two of them alike.

It is better to have no handler at all, than to have a man who does not know his duty; who is either over fussy and anxious, or, on the other hand, sleepy and careless.

A good handler will watch carefully, to see that his principal is not balked or interfered with in any way; that no one is talking near the shooting point or in the puller's box so that the puller is unable to hear the shooter, or is not ready to pull when the word is given; that the dog is in hand and all in readiness before the shooter goes to his mark to shoot; that it is his proper turn; that when his gun is placed in the rack, no one interferes with it or the safety bolt; that the shooter goes to his proper distance, and when the shot has been fired, it is the handler who should call for dog or man to gather it, and remain watching until the referee has given his decision.

Very many referees do not half know their business, and a good handler will often be able to prevent a wrong decision by putting some matter in its proper light to the referee, and asking him to look at the rules before deciding. The handler should always have some spare shells in his pocket, so that in case of a misfire, it is not necessary to go back into the shooting house for a fresh one; he should stand directly behind his man, but not too close, and should try to see, when he misses, what is wrong, and if he thinks best, tell him where he held. Should the sun be shining from behind, he should be careful that his shadow does not fall in front of the shooter, as it may balk him; and the same of any other persons' shadows. He should do all in his power to keep up his man's confidence and make him feel good, but should always remember that, while some men need talking to, others are best left to themselves.

Nothing in the world is more uncertain than pigeon shooting, and a match is never won until it is finished. A shooter who has missed one or two birds badly is very apt to forget this, and to consider himself beaten; but if his handler is of any use he knows what he is thinking about, and reminds him that the other man is more than likely to do the same, and keeps him pegging along.

On the other hand, a man with a good lead on his adversary is very likely to feel unduly exhilarated, and forgets that his turn to do a piece of bad shooting may come before the end of the match; and before he realizes it he has lost his good form, and perhaps finds himself falling behind his so lately despised antagonist.

Here again the services of a good handler come in, as he obliges his man to keep quiet and continue to take as much care as if he were behind in the score, in place of leading.



CHAPTER XIII.

Responsibility of Handlers—The Tricks of Unprincipled Men.

I have not said anything about the handler being responsible for his man getting fair play, because it is not supposed, among the class of shooters for whom I am writing, than there can be anything but fair play; and the referee at any good club would at once put a stop to any practice which had the least suspicion of foul play attached to it, if he were aware that such were going on; though it is more than likely that he knows nothing and has no suspicion of such matters.

But supposing, as no doubt would always be the case, that the principals in a match had no thought of anything but what was fair and straightforward; there are always the men who handle the birds, and the man who pulls the traps, to be taken into consideration. These men have it in their power to give whichever of the shooters they favor a very great advantage over the other, and I have heard of cases where this has been done, merely to demonstrate what they were able to do in that way; at other times simply because one of the shooters had made himself obnoxious to them. Sometimes it is done because they like one man better than the other, or because one is a member of the club they work for, and the other is not.

These men usually belong to a class who bet on such matters among their own associates, and as likely as not they have from one to ten dollars bet on the match that is being shot, although the match itself is between two friends who wish only to have some amusement, and there is no money depending upon it. But as long as it is in the power of such men to affect the ultimate result of a contest, shooters may be sure that certain unscrupulous persons will take advantage of their positions; and where there is much betting on the result of a pigeon match, it is more than likely that the puller or his associates, or both, have

been approached with a view of inducing them to work in the interest of one party or the other.

I have often thought of writing on this matter, but have never before done so; this, however, appears to me to be a good opportunity, as every pigeon shooter who reads these lines will see what he may be contending with, and how he can guard against it, and every management of a club should be compelled to adopt safeguards against a state of things which exists to a very much greater extent than is generally supposed.

A very little study of the rules for pigeon shooting in force at any club will show that those rules were made not only for the good government of a shoot, but also to prevent cheating. There is no use, therefore, in blinding ourselves to the fact that there may be such a thing. Formerly, whenever pigeons were shot from five traps, they were worked by means of five cords, which lay above ground and were pulled by a man who held all five in his hand at once, but pulled only the one designated by a throw of the dice or the turn of an indicator. Among professional shooters and that class, it was a common custom to shoot what were called trap and handle matches; that is to say, that each competitor or his representative put a bird from his own selected lot into the trap before his antagonist shot, and then pulled the trap for him. The match then not only depended upon who could shoot best, but upon who could outwit his antagonist best; and it soon became apparent that there was such a large scope for cheating, where this way of pulling was used, that, in the first place, a wooden frame was introduced with five holes for the ropes to pass through, so that the puller only touched the one which he was about to pull; and later on, various forms of automatic trap pulling machines were invented, which are now in general use.

It must be remembered that these machines were invented to stop the cheating, which it had become evident was going on with the old ropes before in use.

This cheating was done mainly as follows:

1. The traps could be pulled very slowly, or very fast; if the former, the bird would be more likely to dart out quickly, being frightened by the clatter of the trap.

2. The rope of one trap could be pulled slightly, so as to make that trap move, and cause the shooter to turn his head toward it; and at the moment another trap would be pulled.

3. On the shooter calling, "Pull," the trap would sometimes be pulled at once; at other times after a pause; nothing is more balking to a shooter and likely to make him miss than the latter.

4. Some of the birds in the traps would be fast, and some slow, and by the use of a loaded dice a puller could get any number of trap he wished for, and so give a fast or slow bird, as he wished.

5. If the shooter were in collusion with the puller, the latter, by slightly moving the rope leading to the trap about to be pulled, could show the shooter, when he first went to the score, which trap he was going to get.

6. With a crossing wind, and from other causes as well, it is generally the case that certain traps are more difficult to kill out of than the others. The difficult trap could be pulled for one man, the easy ones for the other, more or less.

The new automatic traps were introduced, and were supposed to correct these six ways of cheating; and perhaps for a time they succeeded; but there were clever scoundrels at work, and it was soon found out that by carefully studying the working of these automatic machines, the puller could tell which trap was coming, and more than that, could get the trap he wished; but he could not do this fully if he were under observation the whole time, and carefully watched. However, he can still juggle a little, even if watched.

In England, where betting on each shot runs very high, and where the stakes shot for are very heavy, the trap puller stands out all alone, without any shelter, in front of the referee, and all the shooters and onlookers, with the automatic machine in a locked-up box in front of him; and yet, if not watched, he can play tricks. In this country the climate in winter is so severe that the puller is allowed a shelter hut with a stove in it, and he has it in his power to do what he pleases.

This is quite wrong, and no manager of a club should allow it for one moment. The pulling machine should be locked up and the key hung up in the club-house to be fetched if necessary, so that no member or guest should have to put themselves in the

invidious position of asking that it be done. Even when this has been done you have not stopped all the ways for making you have a poorer chance than your antagonist, whether in a match or sweep; and woe betide the man who hurts the feelings of the puller by suggesting that he can be doing anything he ought not.

You cannot even then stop his giving you particular traps than others, which is arranged by having the wires connecting those traps a little tighter or looser, as the case may be.



MR. CHARLES MACALESTER.

You cannot prevent his pulling quicker for you at one time and slower at another; not answering to your call, "Are you ready?" on the pretense that he did not hear you; and lastly, and what is of vital importance, you cannot prevent his playing you this common trick: as soon as your antagonist has got ahead of you in the score, putting in slow birds, so that you are both likely to kill out straight and therefore your antagonist will keep his lead.

A man whose business it is to handle pigeons for trap shooting very soon gets to know which are the strong, fast birds, and which are the slow and poor ones. When catching them to put into the crates, he knows that those which are most difficult to catch, and those which struggle in his hands after catching, will be the fastest flyers ; these he can put into a separate basket, to use or not, later on, as he thinks best. The birds which allow themselves to be caught easily will not leave the trap with any dash.

Much also depends on the amount of food the birds have had. A bird with its crop full will not fly so fast as one that has been well fed some hours before he is trapped, and so has had time to digest its food.

The men who handle pigeons have many secret ways which they know of, by which they can make a bird fly slowly when it leaves the trap.

As in horse racing, so in pigeon shooting, if those who have the control of things do not make themselves conversant with the ways in which cheating can be carried on, and take proper precautions to prevent it, it is sure to exist to a greater or less degree, in proportion to the amount of the stakes involved.

A new man is put in charge of the pigeons and the pulling apparatus at a club. He finds that he cannot make the birds fly as fast and freely as they do at some other club, he is afraid he will lose his position, and inquires among those who have had the handling of birds elsewhere, how they deal with them, and he soon becomes initiated in the crooked ways of the older hands. And the same with the pulling apparatus; sooner or later he learns all that can be done with it, and while, undoubtedly, some men are too straightforward, no matter what their rank in life is, to take advantage of such knowledge, yet undoubtedly there are many others who would not hesitate to make use of it to favor their friends, to injure those they have a grudge against or lastly, to make money for themselves. There is no doubt, for it has been proved to be so, that at the present moment no automatic trap pulling machine is so perfect that it cannot be tampered with though this is easier with some than with others.

CHAPTER XIV.

The English Bluerock Pigeon—How it is Captured, Bred and Handled.

In the course of these articles, repeated mention has been made of the fact that the English bluerock pigeon is a much faster bird in its flight than those which are bred in this country.

I am often asked to explain the reason for this being so, and whether it would not be possible to import and breed from the English bluerock, and keep it as fast here as it is there.

Several attempts already, have been made to do this, but as might be expected, without success. The conditions under which the bluerock exists in England are all such as to make it and keep it strong and hardy and exceptionally fast in its flight.

The wild bluerock exists in vast numbers all around the rocky coasts of England, Scotland and Ireland; it lives and breeds in caves and ledges in the cliffs; it is exposed to all the storms that blow, and like all birds living near the sea, appears to acquire much of the wildness and force of its surroundings. It has to make long flights to obtain its food, especially in winter, when it exists chiefly on what it can pick off the turnips in the fields. The flight of these birds is so rapid that, standing in front of one of the caves where they frequent, and knowing that thirty or forty of them are coming out of the opening within twenty yards of you, it takes something more than a good shot to kill one, with any degree of certainty, and it is rarely the case that a kill is made with each barrel.

This is especially so when they have been shot at a few times; the way in which they will then zigzag up the cliff, crossing each other and twisting in their flight, is most extraordinary. By secreting one's self near the entrance of the cave, and waiting for the birds as they come in from feeding, some very pretty shooting may be had. These birds are caught and used, either to rear

fresh stock from, for pigeon shooting purposes, or to supply fresh blood to flocks already raised. Quite a number of people in England and Scotland make a business of rearing them to supply the ever increasing demand for fast birds for pigeon shooting in England and on the Continent. The places where they are reared are usually stone towers, built for the purpose, distant from any habitation and in some very thinly populated part of the country; otherwise the birds, which fly and feed in large flocks, would be shot and destroyed by neighboring farmers. They are never fed by hand, summer or winter, and are rarely visited by any person, except when it is required to catch them for the purpose of sending them away to the various people who supply pigeons for the shooting clubs. They thus keep up many of the characteristics of the true wild bluerock; and these birds will always command a very high price in the market. The price paid by the shooters at the clubs is usually 54 cents for each bird, or, if specially picked for a match, 62 cents each.

An impression prevails in this country that, even if faster in its flight, the English bird will not carry away such a heavy load of shot as the American bred bird.

This, however, I am sure, from my own experience in both countries, is not the case. There is no tougher or pluckier bird living than the true bluerock, and unless killed dead, or with a broken wing, he will fly as long as his wings will work, though riddled with shot.

I think a reference to the scores made at Hurlingham or the Gun Club, where the boundary is the high fence all around the ground, and is in some places more than eighty yards, will show this to be the case.

To kill nine or ten birds straight there is quite an exceptional performance; and yet, the men shooting are good shots, and there is little or nothing to choose between them and the best shots here, though naturally, from the size of this country, and the vast number of shooters, there are more good shots in America than in England.

But to return to the matter of rearing the bluerock here. It might be done if there were any part of the country where the birds could get their own food all the year round without having to

be hand-fed, and where they would have to take long flights to find their food; but I do not know where this could be found.

The handling of the birds before and when being trapped, is much better done in England, as a rule, than in this country, and that alone makes a vast difference in the way in which a bird flies when the trap is pulled. Few, if any, clubs in England handle their own pigeons; but these are all supplied by the nearest pigeon purveyor, who sends to the grounds the number of birds required on any particular day, with men to trap them and dogs to retrieve them. The birds arrive there fit to fly for their lives, having been caught that morning; each bird as he is caught is examined, and if not strong and healthy it is put back. Each bird then has its tail feathers squared off with a pair of shears, so that while in a coop their feathers do not become dirty and ruffled from the other birds treading on them, and so retarding the pigeon in its flight. The matter of food and water has been most carefully attended to, so that the birds are neither surfeited with over feeding nor yet faint for want of food or water; each bird is in the pink of condition. They have been kept in large, very roomy cages, and several times a day men have gone in and made them fly about these cages, so as to exercise themselves. When trapping them, the utmost care is taken not to injure them in taking them out of the baskets, nor to hold them in the hand a moment longer than necessary. In cold or wet weather after the trapper takes the bird from the coop, he will hold it inside his jacket or under his arm, so as to keep it warm and dry.

The birds, while in the coop, are guarded from wet, cold, and too much sun. In this country none of these matters are sufficiently attended to, and it is no uncommon occurrence to see birds which should, from their appearance, fly well, doing the reverse, because those in charge don't know how to handle them.

There is no doubt that great cruelty has been practiced in pigeon shooting; all kinds of cruel devices have been used to make the birds fly at once and fly fast. But the men who handle pigeons for the clubs in England have given up any such practices, having found out that no bird flies so well as one that is feeling well and strong, and that has had no tricks played with it.

Every pigeon shooter should do his utmost at all times to stop anything approaching to cruelty in handling the birds. There is no cruelty in clipping the tail feathers as above described, but all attempts to maltreat the birds should be met with condign punishment whenever discovered. Wounded birds should be despatched as speedily as possible; and it is a shame ever to allow such a thing as a wounded bird to remain anywhere within reach without putting it out of its misery, either by shooting it or otherwise.

With regard to this, I think the English plan of retrieving is far better than the American. In England there is no time allowance; as soon as the bird is shot, the dog is loosed; if it catches the bird, well and good; if not, it drives it out.

This plan is as fair for one man as for another, and it does away with the cruelty of waiting one, two, or three minutes, until a wretched bird dies or gets stiff and faint from its wounds. If there is no dog on the ground, a man takes its place; but in that case he must endeavor to catch the bird as speedily as he can.

Not only does this plan do away with one of the strongest arguments used by the "Society for the Prevention of Cruelty to Animals," and other misguided people, who want to stop all kinds of sport, but it makes the shooting quicker and prevents vexatious delays.

Before quitting the subject of the speed of English bluerocks, I would mention that it is rare in England to find a ground used for shooting pigeons that is not perfectly level and covered with grass like a well-kept lawn; were it not for this the scores over there would be far smaller than they are even now, as there is no rise or fall in the ground to deceive the eye; and the background is invariably good. In America it is the exception, and not the rule, to find such a ground.

In England it is so unusual to have a bird remain sitting when the trap is pulled, that there are no special devices used to make them fly; but in America it is usual, and in fact necessary, to have some mechanical contrivance to frighten up birds which would otherwise remain sitting.

The best of these is one which was first used by the Carteret Club, New York, at the beginning of the present winter, and

which has since been adopted by some of the other clubs. It consists of two short sticks, or pieces of strong wire, covered with colored cloth, which are so placed on each side of the trap, that, as it opens, it draws them over, so that they fall lightly from either side into the center of the open trap and on to the top of the bird, if it does not move at once.

This plan has been found very efficacious, and is far better than the ball, which, on the opening of the trap, is drawn by a string up to the trap, but can go no farther.



CHAPTER XV.

Duties of Referees.

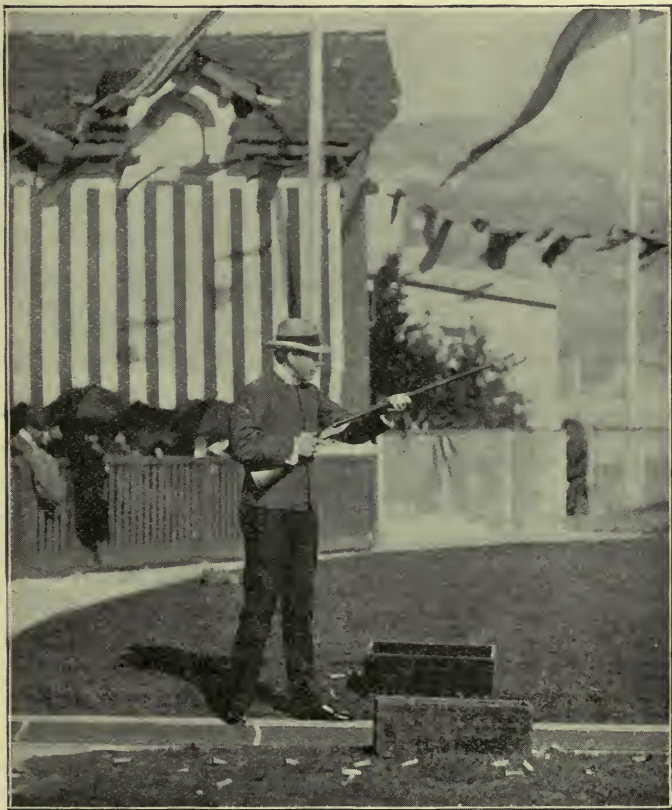
The referee's duties at a pigeon shoot are not quite so arduous as they are at a game of baseball, nor does he get assaulted with a bat, but he does not altogether lie on a bed of roses, and his position is no sinecure. A good referee is a thing of beauty and a joy forever, and seldom to be met with.

There are two gentlemen in the neighborhood of New York who are universally known to pigeon shooters, and one or the other of whom is almost always to be found acting in the capacity of referee at every pigeon shoot of any importance which takes place within their reach; both of them shooters themselves, and men who have lived among shooters and talked shooting, and made it and the rules of shooting their study for many years.

These men's decisions are invariably correct. They are J. S. Hoey, of Long Branch, N. J., and Jacob Pentz, of Bergen Point, N. J., one tall and thin and the other short and stout, but both actuated by the same desire to give everybody fair play, never to show the slightest partiality, favor, or affection for this or that competitor, but to keep an absolutely free and unbiased mind, and to decide every point on its true merits. These are the men that everyone who undertakes the duties of referee should strive to imitate.

I hope that a time will come when pigeon shooters will be willing to adopt one universal set of rules, and that these shall be so framed as to leave fewer points than at present to the judgment of the referee. Some rules now generally in force are useless, others are too vague, and can be read to mean very different things. It is therefore a difficult matter for a referee, at present, to know in all cases what decision he ought to give, as it is the custom on different grounds to read these rules in different ways and give them very different meanings.

I will now refer to some of the chief mistakes which I see made from time to time, by referees who have not attained to the



MR. FRED HOEY.

Shooting at Monte Carlo.

proficiency of the two gentlemen I have named above. The first of these is the common one of thinking that when a referee has once given his decision he cannot reverse or modify it. This is a mistake; there is no rule, or even custom, to justify it. It is true that there is a rule which says that "the referee's decision shall be final;" but this can mean only that the decision of the referee, when finally given, must be accepted by the shooter, who cannot appeal against it.

A referee may have given a hasty judgment, or something may be brought to his notice later on, which he was not aware of at the time he gave his decision; in either case he has the most undoubted right to alter it, and it is only proper that he should do so.

The next point that occurs to me is where a balk is claimed by the shooter. The rule applying to this is No. 6 in the Hurlingham rules, and reads as follows: "If, in the opinion of the referee, the shooter is balked by any antagonist or looker on, or by the trapper, whether by accident or otherwise, he may be allowed another bird." The referee is here called upon to use his judgment, first as to whether the balk claimed comes under the above category, and secondly, whether the miss was caused by that balk; and unless he is satisfied on both these heads, he has no right to give another bird.

The balk here clearly refers to the shooting, and not to anything that may occur later on; yet all sorts of outrageous claims have been made under this rule, and in very many instances have been most unjustly allowed, and the shooter, who had really never been balked, but through his own bad shooting had missed his bird, has been allowed another one, or, in other words, has, nine times out of ten, been given a kill in place of his miss.

For instance: I remember, while a match was in progress at a leading New York club, between two of its principal members, that one of them claimed a balk and had it allowed, solely because, while the bird he had shot at, but not wounded, was flying round inside the boundary, the trapper proceeded to put a fresh bird into the trap. The shooter claimed that the bird might have alighted, and might have been gathered, and the referee, who was the man in charge of the ground, allowed the ridiculous claim.

Another point in connection with this rule as to balking, and one which seldom is given proper consideration, is, that if there has been a balk, such, for instance, as one of the spectators calling out to the shooter while he was in the act of shooting, or the dog being released and getting in the shooter's way before he could use his second barrel, and such balk should have occurred after the first barrel was fired without the bird being wounded, the shooter should not have the use of both barrels at a fresh bird, but should have one barrel only, as when a misfire has occurred with the second barrel.

The referee should always bear in mind that in giving another bird to a shooter, it almost always means giving that shooter a kill in place of a miss, and he is doing a very great injustice to the other contestant or contestants by doing so, unless by the rules the man who missed was clearly entitled to have a fresh bird, and the missed bird called, "No bird."

Then again, in the case of a bird which, after being shot at, and before it has crossed the boundary, is killed by some person other than the proper shooter, or is gathered by some person other than the designated gatherer, the referee has no right, in either of these cases, to allow another bird, unless he is of opinion that, had the bird been left to itself, it would have been properly gathered within the boundary, and before the expiration of the time limit.

Or, in the case where the dog is released, without any order from the shooter, and without his breaking open his gun, and the bird escapes. Here again the referee has no right, in fairness to others, to stretch any point in favor of the shooter, but is bound to call, "Lost bird," unless he really believes that, had the dog been held, the bird would have been gathered.

Or, lastly, when a bird escapes through any opening in the fence, the referee has only the right to call, "No bird," when, in his opinion, the bird could not have flown over the fence.

I can recall several cases where wounded birds have been caught by people who had no right to touch them, and when it would have been an impossibility for the man who has gone out to gather them to do so before they had crossed the boundary; and in every one of these cases these birds were given in favor of

the shooter, either as dead birds, or as no birds, when they should have been lost birds. The shooter has no claim to any more consideration than his opponent; both should get fair play, and no more.

Another point that referees very often err about is when a bird, after being shot at, lights on the fence. The rule reads: "When a bird perches or settles on the boundary fence, it is a lost bird." Not a word is said about the bird closing its wings.

This rule should be read in the same light as the one which says that "a bird shot at on the ground with the first barrel, if killed, is no bird." In this case no claim is ever made that, to be on the ground, a bird must have closed its wings; if its feet are touching the ground when shot at, the bird is always given as no bird.

The moment a bird touches the top of a boundary fence in the act of lighting, it has lighted; the closing of the wings has nothing to do with it. If the bird has been wounded in the feet or legs, it cannot rest on them, and therefore cannot close its wings, but will keep balancing itself with them.

In the same way, when, as often happens, some man or boy on the outside of the fence is trying to catch or knock the bird off the fence, it will continue to flutter its wings, though perhaps too badly wounded to take flight altogether. Only recently I saw this happen, and when, after so fluttering for some seconds, the bird was struck with a stick and knocked back into the ground dead, the referee decided it a dead bird, a most wrong and unjust decision.

Many of the decisions which are given, as to birds having been in the dog's mouth, or the gatherer's hands, are wrong. To be scored a good bird, the dog should have actually held the pigeon in his mouth, even if for a moment only, or the man should have held it in his hand. In either case, the dog or man should have had actual control of the bird, the same as in a catch at football or cricket, where the catcher need not hold the ball for any length of time, but he must clearly have had control of the ball, and it must not merely have passed through his hands, only, for the referee to allow a catch.

Perhaps more mistakes are made by referees in deciding whether a bird which has flown near the boundary fence has been

beyond it or not, than are made about any other point. It is a most difficult matter at any time to say at what moment a bird flying away from the shooting point reaches the boundary, and the further off the boundary is, the more the difficulty is increased. It is a good thing to bear in mind that, as a rule, a bird always appears to have reached the boundary, if well up in the air, before it has actually done so.

The referee at the Gun Club, Notting Hill, London, England, is paid \$2,500 a year to superintend the management of the club and to act as referee, and therefore would be likely to be well informed on all such matters; and yet I once saw him give a decision on this point which was proved wrong, in a very curious manner. The pigeon, a fast driver, had been severely wounded; there was heavy betting on the result of the shot, and therefore its flight, as it wended its way toward the boundary (which is there the stone wall surrounding the ground, and about eighty yards distant), was keenly watched by many pairs of eyes. Mr. Battcock, the referee, considering the bird had passed over the wall, called, "Lost bird." At that moment the bird fell dead, without in any way circling round or changing its flight, and fell fully twelve or fourteen yards within the boundary. Of course the referee reversed his decision, and the bird was scored a dead bird.

CHAPTER XVI.

Inanimate Target Shooting.

Shooting targets made of composition thrown from traps has become a rage in America, and is fast growing in favor over all the world. Among the many inanimate objects thrown from traps which, from time to time, have been invented and put before the public, the composition target is the only one which seems destined to stay. The extent to which this form of shooting is now being carried on in America may be judged from the fact that one factory alone, sold 12,000,000 targets during the year 1893. There are many reasons why this form of shooting should become a favorite amusement with the mass of shooters:

First. In some States of the Union shooting live birds from traps is prohibited by law, and, therefore, this is the only trap shooting which can be practiced.

Secondly. It is not nearly so expensive as live bird shooting.

Thirdly. The shooting is quicker; if a man wants plenty of shooting he can get it. There are no long pauses between shots, when he can do nothing but watch others shooting.

Fourthly. More people can be shooting at one time and there is more fun and geniality about a clay bird shoot than there is usually about one at live birds.

Fifthly. It is simple and there is not so much preparation required for it as for live bird shooting. The birds are always alike, not good one day and bad another, or even on the same day; fast at one time, and slow at another, as is too often the case with the live birds.

Sixthly. As day by day the number of shooters increase, so game becomes scarcer. Then men have to go further to find it, thus putting it out of the power of many, who cannot afford or do not care to give the time, to indulge in what is perhaps their favorite pastime; also, target shooting can be and is chiefly carried on during the summer months when it is close time for all forms of field shooting.

As a result of all this, inanimate target shooting clubs have been formed in about every town in this country.

The old pigeon shot looks down from a lofty height at what he considers child's play, from his point of view, until he tries his hand at this, to him, new game. He then finds that it is far easier for him to hit a live bird than one of those despised saucers, when thrown from a strong trap. He feels piqued at the poor success he meets with at his first trial and tries again and again, till suddenly he realizes that he is enjoying the quick shooting and keen competition, and begins studying his gun and load for inanimate target shooting and getting as keen about it as any school boy. Speaking of school boys, they, too, are in it, and very much so. In this sport each shot costs so little, the father allows his son to try his hand; he finds that the boy does as well as himself, and so the boy has to have targets to shoot at, and his school companions tease their parents to be allowed to do the same, and so the game goes on merrily. These youngsters, by following club rules as to loading and unloading their guns, etc., learn to be careful in handling firearms, and later on, when they are shooting game in the bush and on the hills, they reap the benefit of the early training and accidents are less common.

Trap shooting at inanimate targets is also popular with the fair sex, as there is none of the suspicion of cruelty which attaches to live bird shooting, while the skill required is quite as great or greater.

It is easy to have a clay bird trap set up anywhere, and to go out and shoot either a few shots or as many as a person wishes, removing the trap afterward or not as most convenient.

Several gentlemen whom I know carry these traps on their yachts, and when the fancy takes them, amuse themselves and their guests by shooting clays, whilst becalmed or at anchor.

What perfection this sport has been brought to no one who has not seen a well managed tournament can realize. These tournaments are now almost invariably conducted, and every detail supervised by one or more men who make it their sole business to arrange and look after tournaments from year to year.

A stranger going to the grounds and understanding nothing of what was going on, would see a crowd of men, some with

guns in their hands and some without; some shooting and some filling up their pockets with ammunition. He would think that everything was confusion, and feel alarmed, perhaps, for his personal safety from an accidental discharge of one of the numerous guns he sees in every direction, but as he gets used to the scene, he notices that there is no confusion. One squad is at the traps shooting; every man in that squad is firing and reloading his gun with the regularity and precision of a drilled soldier, and should there be a new comer and he shows the least sign of awkwardness by turning round with his gun loaded or handling it carelessly, he at once hears the voice of the referee calling him to order. Should he persist in being careless, his gun is taken from him and he is not allowed to shoot any more. While this squad is shooting, the squad hustler is calling up the next, telling each man his place and seeing that all are ready to step into the places of the squad before them as soon as the last gun has been fired by that squad. No one is allowed to approach the shooter or interfere with him in any way. As each shot is fired, the result is called in distinct tone by the referee, repeated by the scorer and so registered.

Inanimate target shooting is as unlike live pigeon shooting as that is unlike game shooting in the open fields; but it is great sport, and if any of my readers have not tried it, I strongly advise them to do so. I have shot big game and little game of all sorts, but admit that a good clay target shoot has a very great attraction for me.

The perfection to which guns, shells and ammunition have been brought is here very clearly seen, when the regularity with which any good shot can break these targets is considered. As a rule none are shot at nearer than 35 yards, and thus when they are thrown as hard as they can be, which is now very often done, the range is nearer 45 yards. As everyone who participates in this sport knows, the target is edgewise to the shooter, and the object to shoot at, is, therefore, very small, scarcely larger than an English sparrow, yet such men as Heikes, Van Dyke, Parker, Upson, McMurphy and Dickey, will break 95 per cent., and make occasional runs of 150 consecutive breaks. No matter how true is the shooter's aim, if the gun and ammunition

are not right, a miss will be scored occasionally. The pattern made by the gun at that long distance must be even and regular every time; there must be no wild shots, no balling, no patchy patterns.

The most common system for throwing targets is what is termed known traps and unknown angles; *i. e.*, the shooter stands in front of the trap that is to be pulled, but he does not know in



MR. J. A. R. ELLIOTT
Shooting a Winchester Shot Gun.

which direction the target will be thrown. Occasionally this is varied by the old "known traps and known angles rules," where the shooter stands opposite the trap that is to be pulled and knows in which direction the target will be thrown. As a further variation on these two plans, and to make the shooting as difficult as possible, what is called "the expert system," is sometimes employed. Here the shooter neither knows which of the five traps will be pulled, nor in which direction the target will be thrown.

Still another way called "the reverse system" is used at many tournaments. Here the shooter, standing opposite No. 1, or the left hand trap, gets No. 5 trap, which throws the target from right to left ; he, therefore, gets a crossing shot, but as it is also increasing its distance from him during its flight, it is a very difficult shot to most people. When the shooter is standing opposite No. 5 trap, No. 1 trap is pulled to him in the same way, and the bird from that crosses from left to right, inclining outward all the time. When standing opposite No. 2 trap, No. 4 is pulled for him, giving a straightaway shot. When at No. 3, he gets No. 3, and when at No. 4 he gets No. 2 ; in both these cases getting straightaway shots. This sort of shooting is very difficult, and there is more knack in it than in any of the other forms I have mentioned.

Last comes double rise shooting, when two traps are pulled at the same time. Here only the three center traps are used, and the shooter knows every time which two he is going to get and what the flight of the birds will be. They are pulled in the following order : First, No. 2 and 3 ; second, No. 3 and 4 ; third, No. 2 and 4 ; and so on over and over again.

These might be termed the ordinary ways of throwing inanimate targets. They can be varied when the targets are being shot on private grounds or at club meetings, and can be made useful auxiliaries to live bird shooting. Having targets thrown from the top of a wall or a house, over the shooter's head, gives very pretty sport and teaches a man to shoot incomers. Two or more traps pulled in this way at the same time and throwing birds in the same direction makes the shooting more difficult and teaches use of the second barrel ; or again, having them thrown diagonally across in front of the shooter either from right to left or vice versa, makes pretty shooting and teaches swing and lead.

Very great improvements have been made in the traps which throw the targets as well as in the targets themselves, during the last few years, and with a modern trap and a good target, it is possible to throw birds so far and fast that it is extremely difficult to break them ; whereas, by easing the spring somewhat on the other hand, you can make them as easy as you choose.

A very close shooting gun, and one that gives very regular patterns, is a necessity for inanimate bird shooting, as such a very small surface is presented to the shooter; a gun making an open pattern is sure to let an occasional target escape unbroken.

In choosing a place for shooting inanimate targets, care should be taken to get a good background, as otherwise it is very difficult to see the target, when thrown. The ground should also be level, if possible. At the present moment the chief difficulty in connection with inanimate target shooting to be solved seems to be to find out some way of preventing the best shots from carrying off all the money, both at club shoots and at tournaments, without so badly handicapping them as to make them stay away altogether. It should be remembered that these experts have had their day of beginning and have seen others better than themselves carry off all the valuable prizes; by dint of hard practice and studying out the matter they have succeeded in winning their way into the front rank of shooters; it, therefore, would be eminently unfair to shut them out from a fighting chance of winning. Many plans have been tried, but I know of none so far that has proved successful. It is undoubtedly true that at the present day the poorer shooters do not have a sufficiently fair show. I think that the best solution of this difficulty would be to give all the men who can shoot well enough to find a position, an equal division of the money; this, of course applies to class shooting only, where there are three, four or five moneys, according to the number of entries. The great benefit of this arrangement lies in its once and for all doing away with any such thing as dropping for places. But there is more in it than that. No matter how poor shooter a man is, he can at times shoot better than at others, and if he can shoot at all, would occasionally find himself winning as much money as the best shot on the ground, and would be so pleased with that performance that he would be encouraged to persevere and try again and again. On the other hand, the expert shooter who would never fail to get a place in every event, would get a steady return from his shooting, though not able, as at present, to make a living out of it, at the expense of the poorer shots.

To encourage the experts to attend, a certain number of events might be shot where the prizes would go to a more limited

number, according to the number of entries. In all events, whether at live birds or inanimate targets, I would make it an invariable rule that in case of a tie between two, three or four, according to the number of shooters, division of the money should be compulsory. This would kill off the shooting hog who wants to fatten on his weaker brother.

In target shooting as in live bird shooting from traps, there are many things which the expert has neither found out for himself nor learned from others, the knowledge of which is very useful in helping to make long breaks or a big average.

It must be remembered that a live bird usually flies slower on leaving the trap and faster as it gets further away; with clay targets the reverse is the case. Therefore, you do not want to shoot too quickly at an inanimate target, but rather wait until the target has lost some of its first momentum. As the object to be shot at is very small, it is necessary that great precision should be used and that the centre of the charge should strike it, otherwise a dusted target and not a broken one will be the result.

Experts always try to catch sight of the target as soon as possible after it leaves the trap and the gun is nearly always held up to the shoulder and not below as in live bird shooting. The moment the eye catches sight of the target, the muzzle is aligned on it, and carried along with its flight until it has reached a point at which it begins to lose some of its speed. At this moment it really begins to fall and it is necessary, therefore, to shoot slightly under it—for this reason a more bent gun is necessary for target than for live bird trap shooting.

There is something in the flight of an inanimate target which is very deceiving to the eye, and it is a most difficult matter to discern at what moment the moving object, which has hitherto been rising slightly, is falling, and it is this which necessitates the use of a gun with more drop than would be chosen for live birds which are usually rising when shot at.

For the same reason the head must not be held too upright, but the eye must be well down to the rib of the gun.

It is a disadvantage to have the pull-off of the trigger too light; have the trigger so arranged that the finger may press lightly on it at the moment the gun is first aimed and slightly

increased until the instant the gun should go off, when a slight further pressure releases the tumbler and the gun is fired.

Never shoot at a broken piece of a target, no matter how tempting; the flight is different and you will be more likely to miss it, however easy it looks.

Always note the flight of the target given the shooter following you, as you will have that trap next, and it is a great assistance to you to know whether you are going to get a target thrown at the usual angle or at a higher or lower one than usual.

Watch carefully the length of flight before the target commences to drop. Try to determine whether the curve will be longer or shorter. This is beyond doubt the point in inanimate target shooting where most men show weakness.

Formerly very small loads of powder with $1\frac{1}{4}$ oz. of shot were found best, but as the conditions have been made more difficult the load has been increased and probably that most in use by the best shots to-day, is from 45 to 50 grs. of "E. C." or other smokeless powders with $1\frac{1}{4}$ oz. No. 7. or $7\frac{1}{2}$ shot. I am very often asked the question, Does clay target shooting have an injurious effect on live bird shooting?

I think when a man is commencing to shoot targets it has the effect of making him slow on live birds, but that as he becomes an efficient shot at the former it improves his shooting all round, giving him more power of swinging his gun to right or left and making him shoot with more precision at his birds. While he is fully as quick as formerly, he must not attempt to shoot live birds with the same gun for the reason before given.

Always use a hand guard on the barrels when shooting inanimate targets. The heat of the barrel is unpleasant and you cannot shoot well when unable to hold your gun firmly with the left hand on account of hot barrels.

Never allow yourself to shoot carelessly; give each shot your full attention and brace yourself up for it as though it was the final winning shot of a match.



PIGEON SHOOTING RULES
OF THE
CARTERET GUN CLUB.

Single Bird Shooting.

RULE 1.

The Referee's decision shall be final.

RULE 2.

The shooter, when he is at his mark ready to shoot, shall give the caution: "Are you ready?" to the puller, and then call: "Pull." Should the trap be pulled without the word being given, or not pulled when the word is given, the shooter may take the bird or not; but if he fires, the bird must be deemed to be taken.

RULE 3.

The shooter may hold his gun in any position he pleases.

RULE 4.

If the shooter goes to his mark and orders the trap to be pulled, and does not shoot at the bird, or his gun is not properly loaded, or does not go off, owing to his own negligence, the bird is to be scored lost.

RULE 5.

A miss-fire is no shot, provided the Referee decides the shooter not responsible for any defect in the ammunition or gun.

RULE 6.

If the shooter's gun miss fire with the first barrel, and he uses the second barrel and misses, the bird must be scored lost; but if killed with the second barrel on the wing, it is to be scored a good bird.

RULE 7.

If a miss-fire occurs with the second barrel, the shooter shall have another bird, using a full charge of powder only in the first. He must, however, put the gun to his shoulder and discharge the blank cartridge in the direction of the bird; and the bird must be on the wing when the first barrel is discharged.

RULE 8.

The shooter shall be at his score at the expiration of two minutes from the last shot, unless in case of an accident, when the Referee shall decide what time shall be allowed to remedy the accident.

RULE 9.

The shooter's feet shall be behind the shooting mark until after his gun is discharged.

RULE 10.

If, in the opinion of the Referee, the shooter is balked by any antagonist or looker-on, or by the trapper, whether by design or otherwise, he may be allowed another bird.

RULE 11.

If more than one bird is liberated when the shooter calls "Pull," he may call "No bird" and claim another shot; but if he shoots, he must abide by the consequences, and the first bird shot at shall be considered his selection.

RULE 12.

A bird hit with a missile shall be declared "No bird" by the Referee.

RULE 13.

If the shooter, after having discharged one barrel, opens his gun, or leaves the score, he may not shoot again at the same bird.

RULE 14.

Should the bird not take wing on the opening of the trap, the shooter has the privilege of rejecting it, by calling "No bird;" but should he shoot after declaring, it is not to be scored for or against him.

RULE 15.

If a bird that has been shot at perches or settles on the top of the boundary fence, it is to be scored a lost bird. In case of boundary ground line, any portion of a bird *on* the line is a good bird.

RULE 16.

A bird shot at on the ground with the first barrel is "No bird" if killed; but it may be shot on the ground with the second barrel, if it has been shot at with the first while on the wing.

RULE 17.

Should a bird walk one yard toward the shooter, it shall be called "No bird" by the Referee.

Should a bird not fly after five missiles have been thrown at it, the Referee shall declare it "No bird," and the bird shall be charged to the Club.

RULE 18.

In all cases in which shot is limited, any shooter found to have a greater charge of shot than is allowed, is to be at once disqualified.

RULE 19.

No wire cartridges or concentrators allowed, nor is any foreign substance to be mixed with the shot.

RULE 20.

A bird to be scored good must be gathered within two minutes.

RULE 21.

In all events the standard bore of the gun is No. 12. Those shooting with less are allowed to go in at the rate of half a yard for every bore less than 12 down to 16 bore. 11 bore guns to stand back half a yard from the handicap distance. and no guns over 11 bore allowed.

RULE 22.

Members saving or dividing stakes in an advertised event will be handicapped as if each won.

RULE 23.

Should any shooter stand at a distance nearer than that at which he is handicapped, the bird shall be scored "No bird," if killed; "lost," if missed.

RULE 24.

The weight of the gun used must not exceed eight pounds.

RULE 25.

The size of shot is restricted to Nos. 5, 6, 7, 8 and 9; the charge is limited to one ounce and one quarter.

RULE 26.

If any bird escapes through any opening in the boundary fence, it shall be "No bird," if, in the opinion of the Referee, it could not have flown over the boundary. But in no instance shall it be scored a good bird.

RULE 27.

No scouting allowed on the Club premises, and no bird may be shot at on the Club grounds except by the shooter at his mark, unless specially permitted by the Referee. Any one infringing this rule shall be fined \$5.00.

RULE 28.

In the event of both barrels being discharged at once, the bird shall be scored "No bird," if killed; a lost bird, if missed.

RULE 29.

Only one person, or a dog if the shooter will allow it, shall be permitted to gather the bird. No instrument is to be used for this purpose. All birds must be gathered by dog or man; and no shooter shall have the right to gather his own bird, or to touch it with his hand or gun.

RULE 30.

When a dog is used to retrieve, the bird shall be scored a good bird when the dog has had it in his mouth; if a man retrieves, when he has had it in his hands.

RULE 31.

Should the dog escape from the handler before the shooter discharges his second barrel, and so balk the shooter that he does not use his second barrel, the shooter may have another bird.

RULE 32.

No one may shoot until the trapper and dog have returned to their places.

RULE 33.

All claims under the rules must be made before the succeeding shot has taken place.

RULE 34.

In no event may any entry be made after the beginning of the second round. In case more than one entry be allowed, the shooter must declare the number of his entries before shooting at his first bird.

RULE 35.

When in the opinion of the Referee a shoot has reached the point where the "two-miss" men have no chance, he may hasten to finish by calling up only the clean scores and "one-miss" men, or only the former, even though the event be announced as "three misses out," etc.

RULE 36.

Sweepstakes or Cup-shooting ties are to be decided by "miss and out," unless otherwise ordered or agreed upon.

RULE 37.

If, in the opinion of the Referee, the bird is in danger of being lost through delay or failure of the dog to properly retrieve it, a man may, at the request of the shooter, be substituted for the dog.

"DOUBLE BIRD" SHOOTING.

All double bird shooting shall be done under the following rules:

1. Members handicapped in single bird shooting at less than 27 yards may shoot at 21 yards; all others at 25 yards.
2. The birds shall be liberated from Nos. 2 and 4 traps, unless otherwise agreed upon.
3. Only one barrel should be used at either bird.
4. Each bird must be shot at in the air, and when plunge traps are used, both must be in the air when the first is shot at.
5. If the first bird be shot at on the ground and retrieved, both birds shall be adjudged "No birds;" but if not retrieved, the first bird shall be scored as lost, and the second, if shot at on the wing and retrieved, as "No bird;" but if not retrieved, as a lost bird. If the first be lost, and the second shot at on the wing and retrieved, the shooter shall shoot at another pair with blank cartridge in his first barrel, and his second bird only shall be scored. His first bird shall be paid for by him as if a "No bird."
6. Should both birds be shot at on the ground and retrieved, they shall be adjudged "No birds." Should either escape both shall be scored lost.
7. Should both birds be killed on the wing with one barrel, and gathered, both shall be scored "Kills."
8. If, on the traps being pulled, neither of the birds rise, the shooter may call "No birds," and demand another pair.
9. If a miss-fire occurs with the first barrel, the shooter may demand another pair; but if he uses the second he must abide by the consequences. If the miss-fire occurs with the second barrel, Rule 7 in single bird shooting shall govern.
10. Plunge traps shall be permitted, and if used, shall be placed in positions corresponding with Nos. 2 and 4 traps.
11. Except as hereinbefore provided, the rules of the Club for single bird shooting shall, as far as applicable, prevail.

FINES.

For turning or leaving the score before taking cartridges or shells from guns, \$2.00 for each offense, after being cautioned once.

For shooting behind the danger flags, \$5.00, and the bird to be scored a lost bird.

For shooting about the house and platform, without permission from the Referee, \$5.00.

For putting cartridges in gun before reaching the score, \$2.00.

CLUB NOTICE.

The attention of members is particularly called to articles 10 and 11 of the By-laws, and they are informed that, by resolution of the Governors, no private matches may be shot on the Club grounds on Public Holidays, which are also designated as Club Days.



HURLINGHAM CLUB.

SHOOTING RULES.*

1. The Referee's decision shall be final.
2. † The gun must not be held to the shoulder until the shooter has called "Pull." The butt be clear below the armpit, otherwise the Referee shall declare "No bird." (This rule has been abolished.)
3. A miss-fire is no shot, under any circumstances.
4. If the shooter's gun miss-fire with the first barrel and he use the second and miss, the bird is to be scored lost.
5. If the miss-fire occurs with the second barrel, the shooter having failed to kill with his first, he may claim another bird; but he must fire off the first barrel with a cap on, and a full charge of powder before firing the second.
6. The shooter's feet shall be behind the shooting mark until after his gun is discharged. If, in the opinion of the Referee, the shooter is balked by any antagonist or looker-on, or by the trapper, whether by accident or otherwise, he may be allowed another bird.
7. The shooter, when he is at his mark ready to shoot, shall give the caution "Are you ready?" to the puller, and then call "Pull." Should the trap be pulled without the word being given, the shooter may take the bird or not; but if he fires, the bird must be deemed to be taken.
8. If, on the trap being pulled, the bird does not rise, it is at the option of the shooter to take it or not; if not, he must declare it by saying "No bird;" but should he fire after declaring, it is not to be scored for or against him.

*The wording and punctuation of these rules are according to the official copy of shooting rules issued by the Hurlingham Club.—*Editor*.

†Rule 2 has been abolished. As no edition of these rules has been printed by the Hurlingham Club since discontinuing rule two, the other rules retain the old numbering, as here given.—*Editor*.

9. Each bird must be recovered within the boundary, if required by any party interested, or it must be scored lost.

10. If a bird that has been shot at perches or settles on the top of the fence, or on any part of the buildings higher than the fence, it is to be scored a lost bird.

11. If a bird once out of the ground should return and fall dead within the boundary, it must be scored a lost bird.

12. If the shooter advances to the mark and orders the trap to be pulled, and does not shoot at the bird, or his gun is not properly loaded, or does not go off, owing to his own negligence, that bird is to be scored lost.

13. A bird shot on the ground with the first barrel is "No bird," but it may be shot on the ground with the second barrel, if it has been fired at with the first barrel while on the wing; but if the shooter misses with the first and discharges his second barrel, it is to be accounted a lost bird, in case of not falling within bounds.

14. All birds must be gathered by the dog or trapper, and no member shall have the right to gather his own bird, or to touch it with his hand or gun.

15. In Single Shooting, if more than one bird is liberated, the shooter may call "No bird," and claim another shot; but if he shoots, he must abide by the consequences.

16. The shooter must not leave the shooting mark under any pretence to follow up any bird that will not rise, nor may he return to his mark after he has once quitted it to fire his second barrel.

17. Any shooter found to have in his gun more shot than is allowed, is to be at once disqualified. Any loader supplying in Sweepstakes or Matches, cartridges loaded in excess of the authorized charge, will be dismissed from the Club grounds.

18. None but members can shoot except on the occasion of private matches.

19. No wire cartridges or concentrators allowed, or other substance to be mixed with the shot.

20. In all handicaps, sweepstakes, or matches, the standard bore of the gun is No. 12. Members shooting with less to go in at the rate of half-a-yard for every bore less than 12 down to 16-bore. Eleven-bore guns to stand back half-a-yard from the handicap distance, and no guns over 11-bore allowed.

21. The winner of a sweepstakes of the value of ten sovereigns, including his own stake, goes back two yards; under that sum, one yard, provided there be over five shooters. Members saving or dividing in an advertised event will be handicapped accordingly.

22. Should any member kill a bird at a distance nearer than that at which he is handicapped, it shall be scored no bird, but should he miss, a lost bird.

23. $1\frac{1}{4}$ oz. of shot and 4 drachms of black powder, or its equivalent in any other description of gunpowder, is the maximum charge. Size of shot restricted to Nos. 5, 6, 7 and 8.

24. All muzzle-loaders shall be loaded with shot from the Club Bowls.

25. If any bird escape through any opening in the paling, it shall be a "No bird."

26. From the 1st of May the advertised events shall begin at three o'clock, unless otherwise notified, and no shooter will be admitted after the end of the second round in any advertised event.

27. No scouting allowed on the Club premises, and no pigeon to be shot at in the shooting ground except by the shooter standing at his mark. Anyone infringing this rule will be fined £1.

28. Members can plate guns up till 3 o'clock, but not whilst sweepstakes or matches are being shot.

RULES FOR DOUBLE RISES.

1. In Double Shooting, when more than two traps are pulled, the shooter may call "No birds," and claim two more; but if he shoots, he must abide by the consequences.

2. If on the traps being pulled, the birds do not rise, it is at the option of the shooter to take them or not. If not, he must declare by saying "No birds."

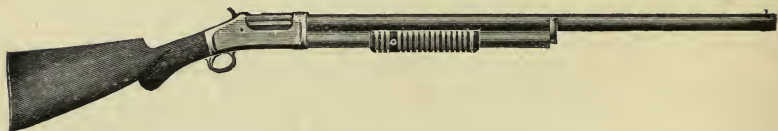
3. If, on the traps being pulled, one bird does not rise, he cannot demand another double rise; but he must wait and take the bird when it flies.

4. A bird shot on the ground, if the other bird is missed, is a lost bird; but if the other bird is killed, the shooter may demand another two birds.

5. If the shooter's gun misses fire with the first barrel, he may demand another two birds; but if he fires his second barrel, he must abide by the consequences. If the miss-fire occurs with the second barrel, the shooter having killed with the first, he may demand another bird, but may only use one barrel; if he missed with his first barrel, Rule 5 in Single Shooting will apply.

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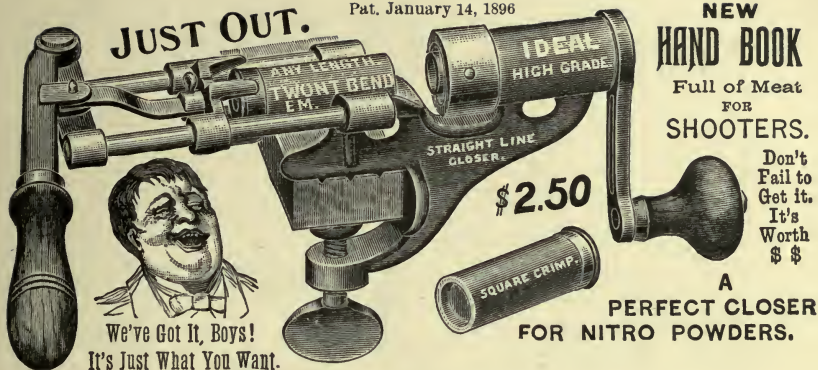
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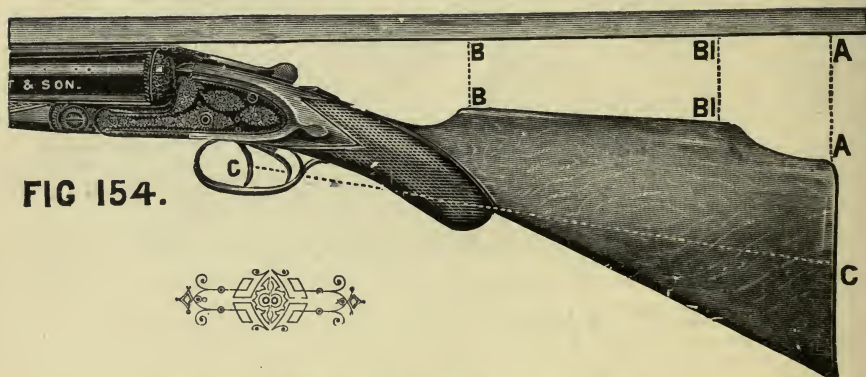


FIG 154.

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